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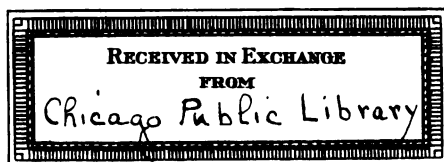
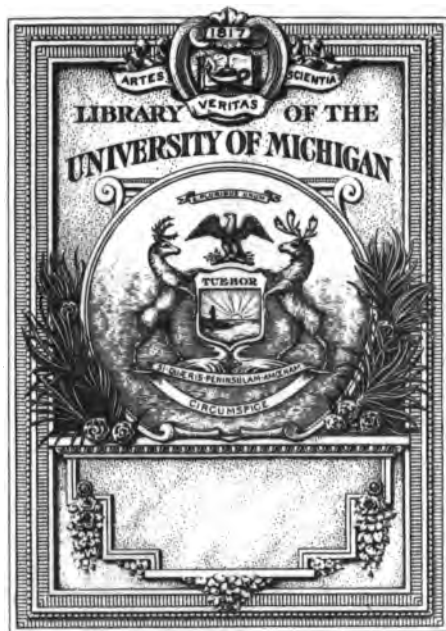
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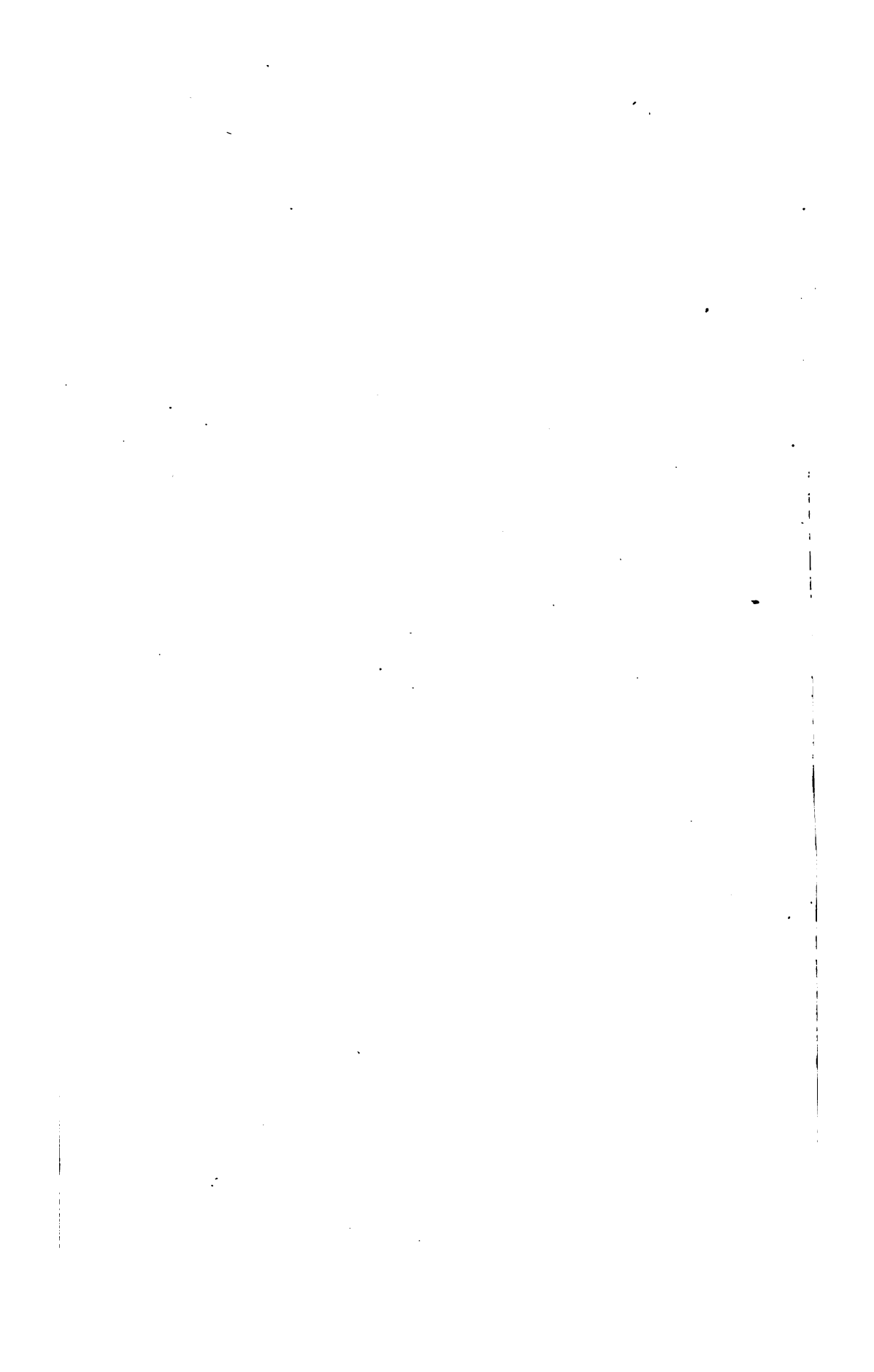
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THIRTEENTH
ANNUAL REPORT
OF THE
Board of Public Works
OF THE
CITY OF CHICAGO
1873-4.



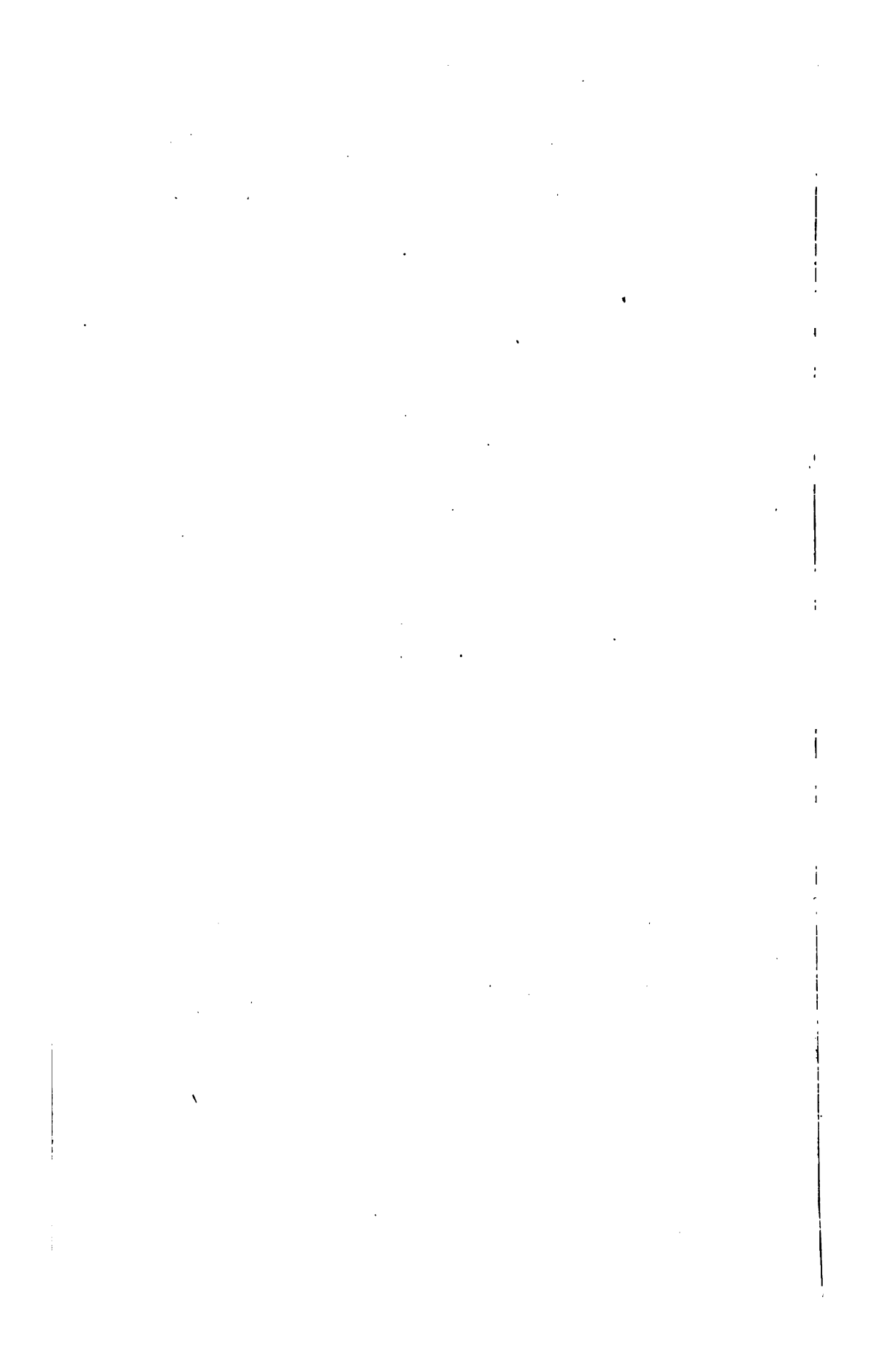
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THIRTEENTH
ANNUAL REPORT
OF THE
Board of Public Works
TO THE
COMMON COUNCIL
OF
THE CITY OF CHICAGO
FOR THE MUNICIPAL FISCAL YEAR ENDING
MARCH 31, 1874.

CHICAGO:
J. S. THOMPSON & CO., BOOK AND JOB PRINTERS,
Nos. 158 AND 160 CLARK STREET.
1874.

Board of Public Works.

Members of the Board :

REDMOND PRINDIVILLE, *Commissioner and President.*

J. K. THOMPSON, *Commissioner and Treasurer.*

LOUIS WAHL, *Commissioner.*

Officers :

ALEXANDER SULLIVAN, *Secretary.*

E. S. CHESBROUGH, *City Engineer.*

COMMISSIONERS' REPORT.

OFFICE OF THE BOARD OF PUBLIC WORKS, }
CHICAGO, June 1, 1874. }

To the Common Council of the City of Chicago :

The Board of Public Works, in submitting their thirteenth annual report, for the year ending March 31, 1874, as required by the charter, congratulate your honorable body upon the successful progress of the second lake tunnel. Chicago will soon be in possession of water facilities for a population of a million and a half persons. Through the agency of our two tunnels, the depths of the lake furnish a drinking water as pure as that enjoyed by any city in the world, while the facilities for its supply are unsurpassed. It cannot be denied that this invaluable source of general health and comfort is a significant factor in the increase of population.

These tunnels reflect lustre no less on the public spirit of Chicago, which demanded so novel and so stupendous enterprises, than on the individual skill and genius which conceived their plan, and which has carried both through manifold difficulties imposed by nature, to an easy and brilliant completion. Our lake tunnels, in clearness of conception, in the marvelous accuracy with which unseen details were anticipated, and hidden impediments removed, are more signal triumphs of science and exact calculation than many engineering works above the earth, which, because visible, are objects of popular wonder and admiration. They will remain to the end of time as testimonials to the intrepidity of Chicago enterprise,

and are already accorded their proper relative rank in the catalogue of great engineering achievements.

The board desire to record here their appreciation of the ability and devotion of the City Engineer, E. S. Chesbrough, upon whose plans and under whose superintendence both tunnels have been built.

The first tunnel was put in use March 25, 1867. A practical idea of the growth of the city may be obtained by observing the annual increase in the total consumption of water for the past seven years, which is as follows:

1867-68.....	(about) 4,000,000,000	gallons.
1869-70.....	6,801,146,720	"
1870-71.....	7,944,684,840	"
1871-72	(estimated) 8,423,810,966	"
1872-73.....	10,050,939,189	"
1873-74.....	11,772,819,032	"

In their report to your honorable body for the year 1871, the board premised that the full capacity of the first tunnel "would be occasionally reached during the summer of 1875," and the facts show that Chicago defies prophecy seemingly hazardous. It is extremely probable that during the hottest months of the present year, the entire supply will be consumed daily, and on account of extravagant use, slight inconvenience may be felt in some portions of the city. The only reliable remedy against waste on the part of citizens is the use of meters. But unfortunately the cost of meters is so great, that their general application cannot be resorted to for years. As will be seen elsewhere, a large number of meters have been added during the past year, and as rapidly as possible further additions will be made. It is earnestly to be hoped that a proper public sentiment on this subject may be created, so that wastage of water shall be looked upon and avoided as criminal.

The extension of the new land tunnel will be completed this autumn. And as soon as the necessary engines can be procured, the new water works at the corner of Ashland avenue and Twenty-Second street will be expeditiously built, so that the two lake

tunnels, with their aggregate daily capacity of 150,000,000 gallons, will be in permanent operation about October of next year. Meanwhile, however, the Board are happy to state that the benefit of the new tunnel will be anticipated at a still earlier day. As soon as public convenience will permit in the coming fall, the water will be shut off for a day or a portion of a day, and a connection will be made between the old and new lake tunnels, so that the capacity of both will be at the service of the city.

The enlargement and fortification of the crib has progressed satisfactorily, as required by contract, and the work will be finished before winter sets in.

The city has been profited by its experience in the erection of the first lake tunnel, as will be seen by these figures:

The old lake tunnel, capacity 50,000,000 gallons, cost.....	\$457,844.95
" new " " " 100,000,000 " " (about).....	400,000.00

The entire cost of the new land tunnel is estimated at \$525,000.00.

WATER PIPES.

During the last year more was done than during any like period in the history of Chicago, to add to its comfort and safety by furnishing water to portions of the city hitherto unsupplied. Nearly forty-three and a half miles of pipe of various sizes were laid, including about $2\frac{1}{4}$ miles in localities where smaller pipes previously laid were taken up or abandoned; which, added to that reported in our last annual statement, gives the city a total of about three hundred and fifty-one and a half miles of water pipes.

In the expenditure of the appropriation for water pipes, the city suffers a serious disadvantage from the present fire limits. The ordinance permitting the erection of wooden tenements within the corporation, invites the formation of such settlements far away from the center of population; and these settlements make pressing demands for water. So long as the present fire ordinance remains in force, it is neither humane nor just to refuse these demands. But compliance with them makes a serious inroad upon the appropria-

tion, which, instead of being used to advantage in a grand system of large distributing pipes, has to be expended over many miles of territory to supply the mere necessities of life at remote points. If the fire limits were made co-extensive with the city limits, as suggested elsewhere, the city would grow more compactly, and proportionately greater benefit would be derived from taxation. It is the supposed difference in the cost of building, rather than in property, that induces settlements in the extremes of the city; and when the cost of building is made uniform, people will be likely to build as near to the business center as possible, as the convenience of transit will more than justify the trifling additional cost of real estate. Then the money spent could be expended so as to furnish better accommodation and more general security. The same remarks will apply to the expenditure of all other funds.

The following table exhibits the quantity and cost of pipes laid since 1861, including the cost of five river tunnels for carrying water mains to connect the three divisions of the city :

YEAR.	NO. OF FEET.	COST.
1861.....	13,761	\$12,008.00
1862.....	50,881	39,197.00
1863.....	68,691	51,205.00
1864.....	62,657	104,828.00
1865.....	73,494	146,332.28
1866.....	60,550	121,589.23
1867.....	128,519	246,420.53
1868.....	161,083	266,961.35
1869.....	167,504	514,652.54
1870.....	180,727	508,855.52
1871.....	91,129	316,165.19
1872.....	122,007	317,385.06
1873 less 14,750 ft. taken up and aband'd.	214,657	579,287.30
1,395,660=264 miles and 1,740 feet.		
Laid prior to 1861	87 "	585 "
Total to April 1, 1874.....	351 "	2,325 "

The average cost of pipe for the year was \$73.00 per ton.

FIRE HYDRANTS.

Four hundred and fifty-five hydrants were added during the year :

North Division.....	55
South Division.....	157
West Division	243
	<hr/>
	455
Number reported last year.....	1,799
	<hr/>
Total, March 31, 1874,.....	2,254

DRINKING HYDRANTS.

The Board recommend that an appropriation be made for the purpose of increasing the number of drinking hydrants in use. That they are not only convenient but also necessary, is now a well established fact, and their construction is creditable to the city, both for the humane and sanitary blessings they confer.

TAPPING OF WATER PIPES.

The following statement shows the number of taps of the different sizes used in making service pipe connections in the past year :

No. of $\frac{1}{2}$ inch taps inserted.....	4,185
No. of $\frac{3}{8}$ inch taps inserted.....	1,371
No. of $\frac{1}{4}$ inch taps inserted	274
No. of 1 inch taps inserted.....	189
	<hr/>
	6,019
 No. of 4 inch service connections made.....	 14
No. of 6 inch service connections made.....	3
No. of 4 inch connections for private water supply made to April 1, 1873,	118
No. of 6 inch.....	10

WATER RATE ASSESSMENTS.

The labor, attention and vigilance involved in the proper assessment of the water rates, make the work of that department responsible and onerous. The destruction and removal of buildings, their enlargement, the erection of new buildings, the laying of new

service pipe and water mains—all of which either increase or decrease the assessments—have to be carefully reported and recorded. And each building in the water district is visited at least once a year, to insure correct assessments.

In addition to the regular work of assessment, much has been done during the past year towards the restoration of books, maps and statistics destroyed in the fire of 1871.

It is estimated that the assessment for the coming year will reach \$800,000.

WATER COLLECTIONS.

That the collection of water rents was a work which exacted fidelity and energy, and that its exactions have been fully complied with, will be appreciated when it is shown that during last year the collections were nearly three-quarters of a million dollars, an increase of \$164,338.42 over the receipts of the preceding year.

The following table shows the total income of the Water Works from the time when the distribution of water commenced:

February 15, 1854 to January 1, 1862	\$744,244.19
Income for fifteen months ending April 1, 1863.....	189,294.80
Income for the year ending April 1, 1864.....	192,246.39
Income for the year ending April 1, 1865.....	224,902.57
Income for the year ending April 1, 1866.....	253,114.49
Income for the year ending April 1, 1867.....	302,017.59
Income for the year ending April 1, 1868.....	338,929.28
Income for the year ending April 1, 1869.....	420,686.94
Income for the year ending April 1, 1870.....	476,968.24
Income for the year ending April 1, 1871.....	539,180.19
Income for the year ending April 1, 1872.....	445,834.64
Income for the year ending April 1, 1873.....	544,465.90
Income for the year ending April 1, 1874.....	708,804.32
Total income to April 1, 1874.....	<u>\$5,380,689.54</u>

WATER METERS.

The work of the meter department, like all others, shows a decided increase over that of previous years, and the Board hope to be able to report a still greater ratio of increase in the future,

as there seems to be no other method of enabling an absolutely fair assessment upon each consumer for what he uses or wastes. The number of new meters added during the year, together with those in use prior to that time is shown by the following table :

Size of Meters.....	$\frac{1}{8}$	1	$1\frac{1}{2}$	2	3	4	TOT'L
No. in use March 31, 1873.....	136	242	96	69	71	4	618
No. of new meters added during the year...	80	62	45	10	21	.....	218
No. of burnt meters repaired and set during the year.....	25	128	12	16	6	.....	187
Total No. in use March 31, 1874.....	241	432	153	95	98	4	1,023

The revenue derived from meter rates during the year was \$156,397.36.

The quantity of water measured by meters during the year was :

North Division.....	166,545,000	gallons.
South Division.....	574,297,500	"
West Division.....	391,995,000	"
Total,.....	1,132,837,500	

METER RATES.

The Board have resolved to abolish what may be called the wholesale and retail sale of water. The principle upon which rates were previously based was that the cost should decrease as the consumption increased. In this way, the cost of 200,000 gallons was \$40.00, and the cost of 1,200,000 gallons was only \$120.00. This was an unfair discrimination against the smaller manufacturing establishments; and meter rates for the coming year will be uniform. The new rates, ten cents per 1,000 gallons, are the lowest in the United States, as will be seen by the following table showing the rates in a number of other cities :

	Cents per 1,000 galls.
New London, Conn.....	20
Hartford, Conn.....	30
Boston, Mass.....	30
Providence, R. I.....	30
New York.....	15
Baltimore, Md.....	15
St. Paul, Minn.....	30 to 50
San Francisco.....	50 to 100
Louisville, Ky.....	15
Cleveland, O.....	70 to 100
Jersey City, N. J.....	20

CONDENSED STATEMENT OF RECEIPTS AND EXPENDITURES.

RECEIPTS.

Income from water rents.....	\$708,804.32
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EXPENDITURES.

Expense of running pumping works.....	\$157,490.27	
Salaries of the Board and officers, and all expenses pertaining to the Water Office	39,128.09	
For repairs of buildings damaged by fire, for repairing pipes and hydrants, and miscellaneous operating expenses.....	76,067.56	
Expense of operating shops.....	2,771.99	
Expense of lake tunnel crib.....	629.88	
Water meters and expenses.....	29,144.29	
Interest paid on water bonds.....	316,862.57	
Water tax refunded.....	336.55	622,431.20
Surplus for 1873-4.....		\$86,373.12
There was transferred from water fund to water tax fund, for laying water pipe in 1873.....	\$134,025.06	

COST OF ADDITIONS TO WATER WORKS DURING THE YEAR.

4, 6, 8, 12, 16 and 36 in. pipe, including laying.....	\$ 579,287.30	
New lake tunnel.....	180,623.34	
Land extension of new lake tunnel..	203,345.39	
New engine.....	1,631.56	
New crib.....	26,421.31	
Total.....		\$991,308.90

COST OF THE WATER WORKS.

Total cost of works to April 1st, 1874, including all work in progress	\$6,203.817.46
------------------------------------------------------------------------------	----------------

MEANS BY WHICH WORKS WERE PAID FOR.

Water Loan Bonds, 6 $\frac{7}{8}$ cent., outstanding.....	\$1,016,000.00	
Water Loan Bonds, 7 $\frac{7}{8}$ cent., outstanding.....	3,565,000.00	
Water Loan Bonds, canceled.....	239,000.00	
Amount of 1 mill tax for 1871.....	289,746.47	
Amount of 1 mill tax for 1872.....	284,197.43	
Amount of appropriation for 1873..	400,000.00	
	5,793,943.90	
Less rebates on 1 mill tax.....	26,294.90	
	5,767,649.00	
From water rents.....	790,212.59	
	6,557,861.59	
Cash on hand.....	\$697,795.47	
Less am't belonging to Income account, 343,751.34	\$354,044.13	
		\$6,203,817.46

SEWERAGE.

The relation between sewerage and the public health has long since been established. The sections of the city most grievously visited by cholera and other epidemics have always been those in which sewerage was partial or entirely wanting, or throughout which there had been gross neglect in connecting private drains with sewers.

Under the liberal appropriations of \$700,000 made by your honorable body last year, work has been actively prosecuted, and nearly twenty-six miles of sewers have been built. The sum of \$506,283.45 had been expended at the close of the last working season. The balance of the appropriation will be used at the earliest practicable moment in the streets where it is most needed.

The following table exhibits the total extension and cost of sewerage annually, since the sewerage department was placed under the charge of the Board in 1861, as well as the work which was done prior to that time:

DATE.	No. of feet of Sewers Laid.	No. of Catch Basins const'd.	No. of M a n- holes con- structed.	No. of Private Drains Laid.	Cost of Cleaning Sewers and Catch Basins.	Total Cost of Con- structing Sewers.
1861 May 6	283,586	1,174	2,102	2,194	\$5,619.48	\$665,188.46
1862 Jan. 1	2,826	18	38	248	5,474.03	3,617.31
1863 Apr. 1	15,676	72	66	365	4,798.35	57,264.51
1864 " 1	89,605	232	204	536	5,123.39	169,299.29
1865 " 1	25,021	188	183	512	9,364.68	87,221.48
1866 " 1	29,948	228	168	1,288	13,818.07	187,643.02
1867 " 1	48,127	327	271	3,722	28,445.16	225,564.53
1868 " 1	89,661	418	555	3,703	26,540.81	416,730.51
1869 " 1	47,841	480	293	3,261	26,954.06	197,152.92
1870 " 1	189,705	771	928	3,979	26,015.18	654,141.26
1871 " 1	78,166	626	468	5,187	21,464.30	258,664.70
1872 " 1	50,716	277	300	3,093	17,415.46	153,295.36
1873 " 1	47,342	245	341	1,435	21,484.16	173,255.76
1874 " 1	146,702	897	1,015	4,691	31,229.27	506,283.45

REPAIRS.

The cost of repairing sewers and catch-basins, and of renewing and repairing man-holes has been, for the year, \$26,329.66.

PRIVATE DRAINS.

The number of connections of private drains with public sewers, during the year, has been as follows :

North Division.....	951
South Division.....	1,635
West Division.....	2,105
	<u>4,691</u>

The receipts for the year from private drain permits have been \$24,765.45.

SEWERAGE EXPENSES, REPAIRS AND INTEREST.

Salaries, office and miscellaneous expenses.....	\$ 16,189.84
Expense of house drain department.....	20,940.09
Raising man-holes and catch-basins to grade.....	17,204.11
Paid on account of damage by fire.....	3,452.31
Repairs of sewers.....	9,125.55
Cleaning sewers.....	30,610.10
Interest.....	184,172.55
Total for the year.....	<u>\$281,694.55</u>

SEWERAGE LOAN BONDS.

Six per cent. bonds, outstanding March 31, 1874.....	\$ 87,000.00
Seven per cent. bonds, outstanding March 31, 1874..	2,550,000.00
Total.....	<u>\$2,637,000.00</u>

SEWERAGE SINKING FUND.

Amount of money in the hands of the City Treasurer, March 31, 1874, not applied to canceling bonds, \$52,088.16.

STREET WORK.

The streets have been kept in a much cleaner and more satisfactory condition during the past year than at any period since the fire, on account of the disappearance of building material upon rebuilt streets, and the paving of others.

For street cleaning and repairs the following amounts have been expended during the year :

North Division.....	\$ 60,000.00
South Division.....	101,302.70
West Division.....	161,855.49
	<hr/>
	\$323,158.19

CONDITION OF THE RIVER.

During the past year the main river and South Branch have been in a satisfactory condition, except at rare intervals. It is highly probable that the South Branch would never occasion serious annoyance but for the mischievous effect of the Ogden and Wentworth ditch, which at times prevents any lake water from entering the Illinois and Michigan canal. The city engineer suggests, in his report, a compromise between the city and the proprietors of the ditch, which may accomplish the desired result. But the Board are clearly of the opinion that the city has the right to protect the usefulness of the canal, and they object to any settlement which includes a recognition of the right of individuals to impede or damage a municipal water-way.

The Board believe that the city should cut off any channel which permits the Aux Plaines river to flow into the Chicago river.

The North Branch has been very offensive, and the Board fear that no material change for the better can be made in it until the completion of the

FULLERTON AVENUE CONDUIT.

If the conduit proves as successful as is now anticipated, it is manifest that it will not only cleanse the North Branch, but will also have a salutary effect upon the main river and the South Branch, both of which suffer from the discharge of the North Branch, when a southerly wind depresses the surface of the lake.

Although the purpose of the conduit and its dimensions have been given in previous reports. it may not be improper partially to recapitulate. An idea of its capacity and usefulness may be had from the fact that it will empty the North Branch every twenty-four hours, and cleanse the entire river every thirty-six hours. The capacity of the conduit under a head of four feet is 34,560,000 cubic feet every twenty-four hours; and 17,280,000 cubic feet under a head of one foot during the same time.

The objection has been raised that in carrying off the corruption of the North Branch, the lake water will become impregnated and rendered injurious. But it will be remembered that these long standing accumulations of filth will have to be removed only once, and can never be formed again to any considerable extent; while the material ejected into the lake by the first process of purification by the conduit will quickly disappear through natural agencies.

The contract for the construction of the conduit was awarded to Messrs. Geo. F. Norris & Co., under proposals opened on March 31, 1874; the terms of their contract requiring the work to be completed on July 1, 1875. Proposals for the conduit were advertised for three times. The delay was advantageous to the city, as will be seen by a glance at the figures of the lowest bidders at each advertising:

On Sept. 23, 1873, the lowest bid was.....	\$403,800
On Feb. 6, 1874, " " "	362,500
On March 21, 1874, " " "	343,284

being a saving of \$60,616.

DREDGING THE RIVER.

Dredging operations have been carried on as usual during the past year, and the river has been kept fairly navigable. The dredging is an expensive, but the only practical method of accomplishing the results arrived at, and to suspend it, even temporarily, would only increase the obstructions and add to the ultimate expense. The cost of the year's operations has been \$67,735.10.

DOCK LINE SURVEYS.

The work of restoring the dock line surveys which were destroyed in the fire of 1871, and of establishing lines for those not already surveyed, has progressed satisfactorily during the year, and with a sufficient appropriation can, in our judgment, be completed this year.

THE OUTER HARBOR.

A statement of the condition of the outer harbor, and of the progress of the work during the past year, will be found in the city engineer's report.

RIVER TUNNELS AT WASHINGTON AND LA SALLE
STREETS.

The walls and copings of these tunnels wherever damaged by fire have been repaired at a cost of \$6,308.47. The cost for their care has been, for Washington street tunnel, \$1,887.70; La Salle street tunnel, (including iron entrance houses, which cost \$1,525,) \$3,748.72. No accident has occurred at either of these during the past year, and they continue to be largely used by pedestrians and the lighter class of vehicles.

BRIDGES AND VIADUCTS.

New bridges were constructed during the year at Clybourne Place and Thirty-fifth street, the former costing \$13,700, and the latter \$9,800.

The entire cost of the maintenance of bridges during the year, including bridge tenders' salaries and repairs, was \$65,960.98.

There are now twenty-nine bridges crossing the river, and thirteen viaducts over railroad tracks. The bridges are in a uniformly good condition, and promise years of endurance.

Some discussion has prevailed concerning the inconvenience suffered by pedestrians by the opening of the bridges for the passage of shipping. It has been suggested that the bridges be kept closed during the day and open at night; or that they be kept closed during two hours in the morning, two hours at midday, and two in the evening. It will be clear to every reflecting mind that any action in this matter which will confer on land or water travel an undue advantage, would be a serious blow upon the city itself. An examination of the magnitude, the nature and the conditions of the commerce which finds its way up the river for distribution and manufacture, establishes the fact that delay greater than that now imposed by the bridge ordinance would be extremely dangerous. The character of the great manufactures along the entire extent of the river, especially in the southwest, the capital invested; their dependence on the quick delivery of material by shipping, and the varied and extensive employment they maintain, must be taken into account. Any assault upon this portion of the industry and enterprise of Chicago would be to the direct injury of the working classes themselves, for whom the twelve or six hours' closing of the bridges is asked. A week's experiment upon either of the plans proposed would result in general derangement or disaster to our manufacturing interests. To attempt to make such regulations permanent would compel the majority of these establishments to abandon their present localities, and seek equal accommodations, not easily, if at all, obtainable in the city. The lumber and coal interests, two of the most important factors in the prosperity of the city, could not safely bear the change, and the entire manufacturing interests of the river and its branches would be seriously injured. After a careful examination of the subject in all its relations, the Board conclude that the general interest of the people is best guarded by the present ordinance, which secures equal privileges to pedestrians and commerce.

In a city characterized by so peculiar a combination of great natural advantages, and some disadvantages, each interest must yield a little to the others, for only by such compromise can the general welfare be most efficiently subserved.

Viaducts were built during the year over the tracks of the Chicago, Burlington and Quincy, and Chicago and North Western Railway companies, on Canal street, crossing Sixteenth street; and on Twelfth street, crossing Beach street, over the tracks of the Pittsburgh and Fort Wayne Railway.

There is a pressing demand for viaducts over the railroad tracks at Blue Island, Milwaukee and Chicago avenues, and the Board notified the railroad companies, as required by law, that these viaducts should be built during the year 1874. Numerous conferences have been held by the Board and the officers of the roads interested, for the purpose of securing the erection of these improvements. Thus far, nothing definite has been accomplished, owing to various causes of delay assigned by the railroads.

The Board are able to announce that during the coming year a viaduct will be completed over the railroad tracks at North Halsted street.

PUBLIC BUILDINGS.

Nothing definite has been done towards the construction of the new City Hall, beyond the award of prizes for the plans offered.

TEMPORARY CITY HALL.

The temporary City Hall, while in some respects inconvenient, and in none equal to the demands of such a city as ours, continues in fair condition, and with care should be made to serve until the completion of the new City Hall.

POLICE AND FIRE BUILDINGS

have been constructed during the year, as follows:

A two-story and basement brick building, corner of Larrabee street and North avenue. Cost \$19,555.55.

A two-story and basement brick building, on Chicago avenue near Kingsbury street. Cost \$17,316.18.

A two-story and basement brick building on Twelfth street opposite May. Cost \$18,580.05.

A two-story and basement brick building on Chicago avenue. Cost \$24,120.98.

A two-story and basement brick building corner of Pacific avenue and Harrison street. Cost \$44,173.75.

A three-story and basement brick building corner of Washington and Clinton streets. Cost \$9,826.00.

Alterations were made to the Madison street Police station at a cost of \$5,093.14; and to the Union Park Police Station at a cost of \$4,064.00.

SMALL POX HOSPITAL.

At the Bridewell grounds a small pox hospital, dead house and barn were erected at a cost of \$15,700.00.

PUBLIC PARKS.

On the 1st of July, 1873, Lincoln Park was turned over to the Commissioners appointed by the Governor. The expenditures on that park to that date were \$4,712.72. The following table exhibits the area of the parks under the control of the Board, and the expenditures for their improvement:

	NO. OF ACRES.	EXPENDITURES.
Washington Square,	2 $\frac{3}{8}$	\$ 8,766.54
Union Square,.....	$\frac{1}{2}$	No expenditure.
Lake Park,.....	42 $\frac{1}{8}$	16,230.45
Dearborn Park,.....	1 $\frac{1}{2}$	No expenditure.
Ellis Park,.....	3 $\frac{3}{8}$	1,630.42
Union Park,.....	11 $\frac{1}{2}$	3,606.53
Jefferson Park,.....	6 $\frac{1}{4}$	1,608.48
Vernon Park,.....	3 $\frac{1}{8}$	4,830.70
Wicker Park,.....	3 $\frac{1}{2}$	5,682.07

Citizens eagerly seek the recreation to be enjoyed in these public "breathing places," and the Board recommend that the Council authorize a liberal improvement of their advantages. While the attractions of Lincoln Park and of the South and West parks entice thousands away from the heat and dust of the city, the smaller parks are entitled to consideration, out of regard for those for whom the distance to the larger parks is an almost insuperable obstacle, no less than for the symmetry and beauty of the city.

SPECIAL ASSESSMENTS.

Most of the pavement laid during the past year has been done under private contract, the assessments not being due until the close of the summer. The rates, however, were higher than those under which the Board could have performed the work.

It is to be hoped that the new assessment law will be found in accord with the recent decisions of the Supreme Court; in which event the city will escape the injustice and expense of paying the "tax-fighters'" portion of the improvement outlay.

BUILDING PERMITS.

During the year nine hundred and thirty-five permits were issued for the erection of brick buildings, and two hundred and twenty-five applications were received and heard for the removal of wooden buildings within the fire limits. Of these one hundred and seventy-five were acted upon favorably.

As a precaution against fire, the board believe that the ordinance permitting the transfer of wooden buildings from one site to another within the fire limits, should now be repealed. As soon as property becomes sufficiently valuable to call for the erection of brick or stone, it cannot be considered a hardship to require that, for the general safety, the wooden structure shall be torn down, instead of being removed to another locality.

The board also recommend that the fire limits be made co-extensive with the city limits.

SIDEWALKS.

The following report will show the work done in the sidewalk department during the year :

SIDEWALK AND PERMIT DEPARTMENT.

CHICAGO, June 1, 1874.

To the Honorable the Board of Public Works :

GENTLEMEN : — During the past fiscal year a much greater amount of labor has been performed by the sidewalk department, than in any previous year.

The urgent demands for walks in that part of the city laid waste by the fire of 1871, and in the more remote localities, so fast filling up with substantial improvements, have made the labors of this department unusually pressing.

Much difficulty in the way of hastening sidewalk construction is caused by property holders who refuse to build the walks in front of their property when notified to do so. Many of them delay and protest until a special assessment enables the city to do the work. Much inconvenience to the public at large and increased expenditures upon the negligent property holders, are the results of these delays. The cheerful and prompt co-operation of property holders in future work ordered in this department is earnestly to be hoped for, and would result in mutual advantage to the city and the property holders.

The following table exhibits the total amount of sidewalks constructed during the year ending March 31, 1874, of which 52 miles and 4,262 feet were new walks, while the remainder, or 53 miles and 3,939 feet, were reconstructed walks.

SIDEWALKS CONSTRUCTED OF DIFFERENT WIDTHS FROM APRIL 1st, 1873, TO APRIL 1st, 1874.

DISTRICT.	DIV.	4 ft.	6 ft.	8 ft.	10 ft.	12 ft.	14 ft.	16 ft.	25 ft.	Cem't.	Stone.	Total.
1st District,	N. D.	.....	46,911	12,593	.....	515	5,797	4,548	224	3,673	3,397	77,568
2nd "	"	3,019	47,712	8,893	.....	773	905	430	.....	150	.....	61,882
1st "	S. D.	.....	14,236	120	150	.....	510	1,898	720	.....	5,446	23,080
2nd "	"	425	5,395	1,625	1,740	300	3,075	1,075	25	3,100	450	17,210
3d "	"	.....	42,826	1,773	.....	.....	5,120	.....	.....	1,917	75	51,711
1st "	W. D.	150	102,082	4,599	.....	.....	6,875	475	525	.....	.....	114,706
2nd "	"	.....	14,476	4,834	62	881	724	7,762	.....	210	346	29,295
3d "	"	725	57,066	6,577	.....	1,272	1,159	1,645	.....	.....	1,128	69,592
4th "	"	2,000	96,462	575	625	8,515	4,200	5,200	.....	.....	.....	117,557
Totals,		6,319	427,162	41,589	2,577	12,256	28,275	23,033	1,494	9,050	10,842	562,601

Total, - - 106 miles 2,921 feet.
Including concrete, 1 mile 3,770 feet.
Including stone, - 2 miles 282 feet.

Sidewalks constructed to April 1, 1873, - - 539 miles.

PERMITS.

In addition to the sidewalks, building, hay scale and vault permits are placed under my charge. Nine hundred and thirty-five permits have been issued for brick and stone buildings. Twenty-eight permits were granted for the location of hay scales, and eighteen for the erection of vaults under streets or alleys.

Very respectfully,

J. L. HANCHETTE,

Sup't of Sidewalks.

CHANGING THE FISCAL YEAR.

The Board would suggest to your honorable body the expediency of petitioning the legislature to change the municipal fiscal year so as to make it identical with the calendar year. Owing to the lateness of the period at which the annual appropriations are made, public work is delayed to serious disadvantage. For instance, in regard to sewerage, laying water pipes, constructing buildings, &c., under the present order, the funds for these purposes are only available in mid-summer, and the Board cannot prepare specifications or advertise for bids until the season is far advanced; whereas, economy as well as convenience, requires that the contracts should be awarded and operations begun as early in the spring as possible, so as to secure the largest term of favorable weather for the performance of work.

OFFICIAL.

On the 12th of February last, the term of Commissioner W. H. Carter having expired, that gentleman retired, carrying with him the esteem of his associates. The vacancy was filled by the appointment of Commissioner Louis Wahl. At the first meeting of the new Board, Commissioner Redmond Prindiville was elected President, and Commissioner J. K. Thompson, Treasurer of the Board. On February 14, 1874, Mr. F. H. Bailey, who had filled the office of Secretary of the Board for over three years in a highly acceptable manner, tendered his resignation, and was succeeded by the present incumbent.

AREA OF IMPROVEMENTS.

In estimating the extent, the variety, the speed, and the value of public improvements carried on by the Board, and the difficulties to be constantly overcome, the peculiar conditions under which the city of Chicago has been built should be taken into account. The older cities developed according to a fixed ratio, and grew compactly. The development of Chicago has been so swift that few years have furnished reliable standards for subsequent ones, and in no large city of the world is the ratio of area to population so great.

The city has a length north and south of seven miles and an average width of five and a half miles, with the exception of the part north of North avenue, which is but three miles in width, making a total area of about 22,400 acres, which is nearly one-third of the area of London. The operations of the Board extend over this entire territory, and include 609 miles of streets, 170 miles of sewerage, 350 miles of water pipes, the lake, land, and river tunnels, the water works, public buildings, nearly fifty bridges and viaducts, the parks, the protection and cleaning of the river, and a river and dock frontage, as shown in the following table :

LENGTH AND AREA OF RIVER, CANALS AND BASINS, AND TOTAL DOCK FRONTAGE.

	Total length feet.	Average width feet.	Area sq. feet.
Main River.....	7,000	300	2,100,000
North Branch.....	24,000	175	4,200,000
South Branch.....	21,500	175	3,762,000
West Branch of South Branch.....	17,100	75	1,282,500
South Branch of South Branch..	9,300	75	697,500
Slips, Canals and Basins.....	87,150	100	8,715,000
Total.....	116,050 2	.	15,757,000
Total Dock Frontage.....	232,100		

A consideration of this vast territory, and of the great net-work of improvements which minutely cover it, will sufficiently account

for the difficulties experienced in prosecuting public works at the same pace which marks private enterprise.

The labor and expenditure involved are exhibited in detail in the appended reports of the heads of departments, and to these your attention is respectfully directed.

REDMOND PRINDIVILLE,	{	<i>Board of Public Works.</i>
J. K. THOMPSON,		
LOUIS WAHL,		

CITY ENGINEER'S REPORT.

CHICAGO, May, 1874.

To the Board of Public Works :

GENTLEMEN :—The City Engineer, in presenting his report for the year ending March 31st, 1874, submits first, as usual, that portion which relates to operations at the pumping works, and as stated by the Chief Engineer :

REPORT OF THE ENGINEER OF THE PUMPING
WORKS.PUMPING DEPARTMENT WATER WORKS, }
CHICAGO, April 15th, 1874. }E. S. CHESBROUGH, Esq., *City Engineer* :

DEAR SIR :—I present herewith the twentieth annual report of the operations of this department, for the municipal year ending March 31st, 1874.

Since the date of my last report, 11,722,819,032 gallons of water have been pumped, being nearly 1,672,000,000, or 16.63 per cent. more than the quantity pumped the previous year.

The daily average quantity pumped during the year ending March 31st, 1873, was twenty-seven and one-half million gallons. The smallest daily average for a single month, for the same period, was in month of April, viz., twenty-three and one-quarter millions, while the largest average during the year referred to, was in March, being thirty-one and one-half millions. On the 24th day of that month thirty-three and one-quarter millions were pumped.

The daily average pumped during the period covered by this report, reached a trifle over thirty-two million gallons, while the largest and smallest average for a single month was thirty and one-half millions, in April, and thirty-four millions in November. The greatest quantity pumped in one day was December 10th, viz., nearly thirty-seven millions; although this quantity was nearly reached several days in the months of December, July and August, and during several hours of those days the quantity pumped was at the rate of over forty millions per day.

The following tabulated record shows in detail the operations of this department, for the year just closed:

OPERATIONS OF ENGINES AND BOILERS.

Months.	No. of Days.	No. of Hours Run per Month.	Average No. of Hours Run per Day.	Total Revolutions per Month.	Average No. of Revolutions per Day.	Total No. of Gallons Water Pumped per Month.	Average No. of Gallons Water Pumped per Day.	Total Pounds of Coal Consumed per Month.	Average Pounds of Coal Consumed per Day.
1873, April	30	H. M. 719 55	23 58	833,985	27,800	916,329,315	30,544,310	2,240,920	74,697
May	31	744 00	24 00	1,144,486	36,918	951,025,086	30,678,228	2,215,730	71,475
June	30	720 00	24 00	417,872	13,929	936,614,148	31,220,471	2,378,780	79,292
July	31	744 00	24 00	377,453	12,176	1,000,695,844	32,280,511	2,565,220	82,749
August	31	742 55	23 58	389,700	12,571	1,033,164,846	33,327,898	2,633,310	84,945
September	30	718 05	23 56	367,267	12,242	978,690,925	32,456,864	2,429,890	80,979
October	31	744 00	24 00	384,332	12,398	1,018,983,312	32,868,816	2,522,860	81,382
November	30	719 05	23 58	386,105	12,870	1,023,633,854	34,121,128	2,431,970	81,066
December	31	744 00	24 00	780,326	25,172	1,026,230,398	33,104,206	2,502,150	80,714
1874, January	31	744 00	24 00	1,144,012	36,903	955,646,383	30,827,802	2,488,190	80,264
February	28	672 00	24 00	1,050,286	37,510	884,813,362	31,600,477	2,150,880	76,817
March	31	744 00	24 00	1,184,140	38,198	1,002,041,559	32,323,921	2,491,830	80,382
Totals,	365	8,755 20	287 50	8,459,964	278,687	11,722,819,032	385,353,632	29,051,230	954,762
Gen'l Av. p. M.	.....	729 36	23 59	704,997	23,224	976,901,586	32,112,802	2,420,936	79,563
Gen'l Av. p. D.	.....	23 59	.....	23,178	.....	32,117,312	.....	79,592	.....

NOTE.—The coal used for heating the entire premises is included in above amounts.

RUNNING TIME.

It will be seen that the engines have been in operation almost constantly throughout the year, the actual running time being $8,755\frac{20}{60}$ hours; an average of $23\frac{50}{60}$ hours daily, being an average loss of less than one minute per day, the aggregate time being $4\frac{10}{60}$ hours.

A portion of this time was lost on the nights of August 20th and 23d, it being necessary to stop the engines in order to check the current of water through the tunnel to enable a diver to descend into the shaft at the "crib."

COAL.

Has been received and used as follows :

	TONS.	POUNDS.
On hand April 1st, 1873,.....	472	1,060
Received of "Lackawana".....	14,459	1,650
Received of "Midway".....	142	480
Received of "Erie".....	97	1,260
	TONS.	POUNDS.
Used for pumping, heating premises, etc.	14,563	750
Used for work shops, pipe-lay- ing, etc.....	185	490
On hand April 1st, 1874,.....	420	1,210
Total.....	15,172 $\frac{450}{2000}$ tons.	15,172 $\frac{450}{2000}$ tons.

A considerable portion of the coal used during the year was quite poor as a fuel; not so much on account of the coal itself, but largely owing to the presence of non-combustible material, due to careless mining. This necessitated the employment of extra help in the boiler-rooms.

EXPENSE DUE TO PUMPING.

Salaries of engineers.....	\$ 7,470.00
Labor, firemen, etc.,.....	14,547.19
14,525 $\frac{1133}{888}$ tons of coal, at an average cost of \$8.56..	124,857.90
477 $\frac{1}{4}$ gallons of lard oil,.....	354.55
191 gallons of cylinder oil,.....	238.76
2 gallons of cosmoline oil,.....	2.00
27 $\frac{1}{2}$ gallons of globe oil,.....	13.75
1 gallon castor oil,.....	2.00
39 $\frac{1}{2}$ pounds of lubricating compound,.....	19.75
170 pounds of tallow,.....	17.00
1,537 pounds of waste,.....	238.24
52 pounds of rubber packing,.....	31.80
218 pounds of eagle packing,.....	78.57
13 pounds of cotton packing,.....	4.80
78 $\frac{1}{2}$ pounds of hemp packing,.....	23.99
Small stores,.....	200.19
Gas for lighting works,.....	1,579.75
Repairs of boiler room tools,.....	136.12
Repairs of engines,.....	913.84
Repairs of boilers,.....	554.99
	<u>\$150,784.69</u>

Cost of delivering water per million gallons, \$12.86.

Cost of delivering water per million gallons in former years,
and cost of coal :

	Average cost of coal per ton.	Cost per mil- lion gallons.
1865,	\$ 9.94	\$ 16.64
1866,	9.21	15.25
1867,	8.51	14.03
1868,	7.03	11.87
1869,	7.60	12.45
1870,	6.93	11.71
1871,	7.49	11.31
1872,	8.09	12.02
1873,	7.18	11.64
1874,	8.56	12.86
Average for ten years,.....	\$8.05	\$12.97

The quantity of water pumped each month, for the past ten years ; also, the total quantity pumped each year, together with the daily and annual increase, will be found in the following tables :

TABLE SHOWING QUANTITY OF WATER PUMPED EACH MONTH.

MONTHS.	1864-65.	1865-66.	1866-67.	1867-68.	1868-69.	1869-70.	1870-71.	1871-72.	1872-73.	1873-74.
April	178,018,170	189,181,468	260,207,901	281,904,710	376,480,083	515,558,886	561,266,364	720,000,000	696,411,330	916,329,315
May	201,471,216	212,575,920	278,006,804	282,813,313	402,382,583	511,024,720	628,128,478	713,000,000	758,520,288	951,025,086
June	280,814,576	249,935,040	271,415,472	318,358,925	422,909,052	537,626,771	730,501,639	735,000,000	748,988,470	986,614,148
July	228,227,723	254,045,040	310,687,104	363,322,276	505,513,404	641,359,425	766,072,060	806,000,000	876,206,581	1,000,695,844
August....	257,109,860	255,641,084	299,800,082	375,441,736	482,160,940	626,549,674	797,090,274	868,000,000	852,976,814	1,038,164,846
September	237,137,088	266,145,900	262,016,784	354,965,654	447,213,481	592,379,232	751,256,886	780,000,000	842,668,858	978,690,925
October...	191,542,516	246,406,639	264,920,802	377,585,973	456,278,707	556,909,988	694,056,940	442,337,951	843,791,299	1,018,933,312
November.	165,083,042	200,101,293	224,726,521	350,800,232	430,887,264	550,754,730	650,980,982	657,138,219	883,879,447	1,023,633,854
December.	208,044,966	192,616,708	211,366,883	378,710,850	466,284,049	569,074,149	558,179,911	620,598,358	877,853,981	1,026,280,398
January...	232,181,600	236,844,455	259,410,174	380,912,240	457,504,543	548,247,452	602,621,440	684,569,081	905,391,154	955,646,383
February..	189,244,751	227,597,778	257,166,480	380,867,289	418,212,220	525,713,115	547,675,127	668,788,080	888,244,790	884,813,362
March.....	209,569,260	246,776,084	269,086,652	386,108,511	508,848,250	625,948,628	656,904,794	728,459,377	976,055,777	1,002,041,559
Totals.....	2,523,339,218	2,777,817,349	3,168,760,609	4,231,791,659	5,374,624,576	6,801,146,720	7,944,684,840	8,423,890,966	10,050,989,189	11,722,819,032

TABLE

SHOWING TOTAL QUANTITY OF WATER PUMPED, TOGETHER WITH ANNUAL AND DAILY INCREASE;

ALSO, THE GREATEST DAILY AVERAGE FOR A SINGLE MONTH, FOR THE FOLLOWING YEARS:

YEARS.	Total Quantity Pumped. GALLONS.	Annual Increase. GALLONS.	Average Daily Quantity Pumped. GALLONS.	Average Daily Increase. GALLONS.	GREATEST DAILY AVERAGE.	
					MONTHS.	GALLONS.
1858.....	1,091,865,459		2,991,418		September.....	3,617,818
1859.....	1,415,147,910	323,282,453	3,877,119	885,706	October.....	4,565,388
1860.....	1,716,786,552	301,338,642	4,703,525	826,406	July.....	5,367,569
1861.....	1,767,154,689	50,368,137	4,841,520	137,995	August.....	5,438,790
1862.....	2,217,279,739	450,125,050	6,074,739	1,233,219	July.....	6,748,899
1863.....	2,336,108,454	118,128,715	6,400,298	325,559	January.....	6,770,483
1864.....	2,623,339,218	187,230,764	6,918,259	512,961	August.....	8,298,850
1865.....	2,777,817,349	254,478,131	7,610,459	697,200	September.....	8,871,580
1866.....	3,168,760,609	390,943,260	8,681,536	1,071,077	July.....	10,022,164
1867.....	4,231,791,659	1,063,031,050	11,562,278	2,880,737	March.....	12,455,113
1868.....	5,374,624,576	1,142,832,917	14,724,999	3,162,726	March.....	16,414,490
1869.....	6,801,146,720	1,426,522,144	18,633,278	3,908,279	July.....	20,689,014
1870.....	7,944,684,840	1,143,538,120	21,766,260	3,133,082	August.....	25,712,589
1871.....	8,423,890,966	479,206,486	23,464,877	1,698,617	August.....	28,000,000
1872.....	10,050,339,189	1,627,048,223	27,536,819	4,071,942	March.....	31,485,670
1873.....	11,722,819,032	1,671,879,843	32,117,312	4,580,493	November.....	34,121,128
Average for 16 years.....	4,597,759,810	664,372,121	12,618,730	1,820,375	.....	14,285,904

TABULAR STATEMENT OF OPERATIONS OF EACH ENGINE.

ENGINES.	HOURS AND MINUTES.	TOTAL REVOLUTIONS.	TOTAL GALLONS OF WATER PUMPED.
1853	1,943 49	1,149,916	596,576,420
1857	3,747 00	2,282,948	1,862,885,568
1867	3,827 10	2,472,392	2,490,866,289
1872	4,952 40	2,554,708	6,772,990,755
Totals.....	14,470 39	8,459,964	11,722,819,032

THE SHOPS

Connected with this department continue to be a source of convenience to the city. The amount of work done during the past year exceeds that for any like period.

There have been manufactured of

NEW HYDRANTS

Double nozzles.....243
Single nozzles.225—468

Of this number three hundred and eighty-seven have been delivered, leaving eighty-one on hand.

NEW STOP-COCKS

Have been made as follows:

Four inch.....146
Six inch.....124
Eight inch..... 90
Twelve inch..... 22
Sixteen inch..... 8
Twenty-four inch..... 1—391

Of this number two hundred and seventy-three have been delivered, leaving one hundred and eighteen on hand.

In addition to the foregoing, considerable work has been done for the bridge, street, sewer and other city departments.

ADDITIONS.

New tools and fixtures have been added to the shop,

Costing.....	\$2,153.14
Value of tools previously reported.....	3,836.93
Total cost of tools.....	5,990.07
Cost of coal, oil, etc.....	\$1,052.17
Repairs of building.....	25.02
Superintendence, (deducted from salary of Engineer,).....	750.00
Total cost of coal, oil, repairs of building &c.....	\$1,827.19

EARNINGS.

Deducting the expenses noted above together with eight
 3/4 cent. interest on total cost of tools, also allowing
 four 3/4 cent. for depreciation of same, and estimating
 the value of the work manufactured at considerably
 less than current prices, the nominal net earnings
 of the shop amount to..... \$5,761.35

LIST OF HYDRANT AND STOP-COCKS ON HAND.

New double hydrants.....	54
“ single “	27—81
“ four inch valves,	49
“ six “ “	33
“ eight “ “	30
“ twelve inch “	3
“ Sixteen inch valve,.....	3—118

THE COST VALUE

Of these, including the raw material in the shop, is.....	\$11,733.60
Add value of tools,.....	5,990.07
Total value of stock in shops,.....	\$17,723.67

CONDITION OF THE PUMPING MACHINERY.

The operation of the engines and boilers, as previously shown, has been nearly constant, during the entire year. The supply of water, therefore, has been uninterrupted, with the exception of a short time, before noted.

No accident or breakage has occurred to the machinery during the year to interfere with its operation.

The amount expended for repairs upon the engines is \$913.34. This sum includes the refitting of an old steam piston for engine "57," and new packing rings for same.

The repairs on boilers have cost \$554.99, making the total expenditure for repairs due to pumping, \$1,468.33, or less than twelve and one-half cents per million gallons. The new valves and seats for the pumps of engine "57," referred to in last report, are now being made, and will be put in place as soon as completed.

The temporary disuse of the lake tunnel on the 13th of October last rendered it necessary, for several days, to take the water from the old "shore basin," which had not been in use for a number of years, consequently a large quantity of sand was carried into the pump-well by the flow of water, and drawn through the pumps of the

NEW ENGINE, "72"

Which was in operation at the time. The sand caused considerable damage to the metallic packing in pumps, so that most of it had subsequently to be renewed. The cast iron check valves were also found to be cracked and repaired with but trifling cost. These are the only repairs of note done since the completion of this engine which has given entire satisfaction. By referring to the tables it will be observed that it has pumped nearly fifty-eight per cent of all the water delivered to the city during the past year, and during that time it was kept in constant operation for a period of six and one-half months making nearly two and one-half million revolutions and pumping during that time six thousand four hundred and forty-eight million gallons of water.

Since last report this engine has been tastily painted, and brass hand rail put in place, around the lower part. This completes all the work contemplated in the contract for its construction.

The work of

RESTORING THE BUILDINGS, ETC.,

Damaged by the fire of October, 1871, has been slow, owing to the necessity of non-interference with the operations of pumping. However, much important work has been done during the year, and but little now remains to render everything complete.

The iron beams and columns for supporting the new tile floor were put in by the men employed in this department. The work was commenced June 16th, and completed—including that of contractors for laying the "Minton tile"—September 4th.

The three old engines have been painted, and the steam cylinders and air chamber have been substantially incased in black walnut. These engines have also been provided with iron foot-walks around the working beams, and brass hand-rails upon main floor.

Considerable work has been done during the year toward repairing the exterior of the building, and improving the grounds. A stone curb has been set across the west front of the building forming a circular area sixty feet in diameter, in the center of which a fountain is to be constructed. Within the curb an asphalt pavement is laid, making a very desirable and substantial driveway.

About one hundred trees, from four to sixteen inches in diameter, have been set around the building, and the ground graded preparatory to sodding, or sowing with grass-seed. The blooming of these trees, and the presence of grass, united to the substantial improvements already made, will greatly relieve the barren appearance which has hitherto characterized the grounds surrounding these works.

Chicago avenue, from Pine street east, which was recently increased in width from fifty to one hundred feet, has been curbed with stone, and the surface graded with ashes from these works. Considerable work remains to be done upon the eastern portion of the grounds, the most important of which is the erection of coal-houses which are greatly needed for reasons set forth in my last report.

THE WATER TOWER

Has successfully withstood the action of the natural elements, nor is there any evidence of wear incident to ordinary use.

Respectfully,

DEWITT C. CREGIER,

Engineer.

CONSUMPTION OF WATER.

But little under the head, so far as our city, together with a comparison with other cities of our country, is concerned, can be added to what will be found on pages sixty-one to sixty-five, in the last annual report of the Board.

A paper by Mr. Deacon, the Borough Engineer of Liverpool, and published in the *Albion*, of that city, January 7th, 1874, has special interest in this connection, as showing the amount of preventable waste discovered in one large city. He succeeded in diminishing the waste in one district containing thirty-one thousand inhabitants, who, under the intermittent system, that is, with water in the city pipes only eight to ten hours in the twenty-four, drew nineteen and one-half imperial gallons a day, and under the constant supply service thirty-three and one-half gallons, so much that the same population under the constant supply service consumed only twelve and one-sixth imperial, or fourteen and three-tenths United States gallons, daily.

A careful reading of this paper will show that in some respects the mode of distributing water in Liverpool, and the condition of the pipes, at least in some parts of it, are very different from what they are here. There is every reason for believing that nothing like such waste or leakage occurs in the Chicago pipes, because the means of detecting it here are unusually good, and frequent efforts have been made to find leaks that were supposed to exist. Carelessness in private and other houses, in suffering taps to remain partly open, or in allowing leaky pipes to go unrepaired, is sufficient to account for the excess of consumption in this city above all that is legitimately required.

Meters are undoubtedly the only practicable means of preventing this waste, or at least of securing to the city payment for all the water passing into the premises of regular takers. The objections to the universal introduction of water meters into private houses are such that it has never yet been thoroughly done, and

maintained, in any important city. Could any such saving as that afforded in a part of Liverpool be made here, it would no doubt eventually be worth all it would cost, that is, the annual amount saved in the cost of pumping, capitalized at seven per cent., added to the saving in future extension of the works, would be greater than the cost of the meters and their maintenance. The first effect however of such a measure, carried out suddenly, would be not only a large expenditure of money, but a probable loss of revenue until sufficient time could elapse to adjust a new tariff to the new order of things.

QUALITY OF WATER.

This was more objectionable on two occasions than at any other time since the completion of the lake tunnel in 1867. The first was owing to the necessity of taking water from the inlet basin on the shore for seventeen days in October, the cause of which will be found explained under the head of the new lake tunnel. The damaging effect of the shore water upon the machinery, has already been described by the Chief Engineer of the pumping works. The other occasion was on the 12th of Nov., just after a remarkably severe snow storm on the lake, which made the water very turbid far out beyond the crib. A repetition of the first, it is hoped, will rarely, if ever occur again, but there is no help against the latter, and to a greater or less extent, the lake water will be turbid, after every north-easter.

INLET BASIN.

Owing to the necessity already mentioned of having to take water from the shore, the inlet basin was dredged out. Much sand had to be removed to effect an entrance through the bar on the outside. Rough weather made this very tedious and expensive. Every practicable precaution was taken to clear away improper substances from near the old inlet; but the greatly increased quantity of water required for the city caused such an increased velocity of current over what used to be, that sand, pieces of sunken wood and other things were drawn in considerable quantities into the pumping well of the new engine.

As soon as the dredging was finished, the basin commenced filling up again rapidly, and the inlet to it is as completely blocked up as ever. It is hoped that nothing will ever make it necessary to re-open the entrance, still the possibility of being able to do it, in case of necessity, must not be lost sight of.

RESERVOIRS.

Nothing can be added under this head to what was said last year. Experience with the new works, yet to be completed, is deemed just as necessary now, to show what should be done with regard to the reservoirs.

WATER PIPES.

There were laid during the year ending March 31st, 1874, the following main and distributing pipes, viz :

SOUTH DIVISION.

ON WHAT STREET.	BETWEEN WHAT STREETS.	Length in feet.	Dia- me- ter in inches.
Arnold st.	Twenty-fifth and Twenty-sixth sts.	664	6
Arnold st.	Thirty-first and Thirty-third sts.	720	4
Arnold st.	Thirty-fifth and Thirty-ninth sts.	2,675	4
Auburn st.	Thirty-third and Thirty-fifth sts.	1,500	6
Adams st.	La Salle st. and eastward.	234	16
Adams st.	La Salle st. and eastward.	16	12
Butterfield st.	Thirty-fifth and Thirty-ninth sts.	2,687	4
Bushnell st.	Portland ave. to connect.	20	4
Broad st.	End of pipe and Thirty-second st.	119	4
Burnside st.	Thirty-fifth and Thirty-ninth sts.	2,615	6
Bryant ave.	End of pipe and Stanton ave.	250	6
Bonfield st.	Lyman st. and Archer ave.	787	6
Clark st.	Lake and Randolph sts.	458	8
Clark st.	Lake and Randolph sts.	18	6
Couch place.	Across Clark st.	100	6
Couch place.	Across Clark st.	24	4
Calumet ave.	Thirty-first st. and southward.	78	6
Congress st.	Across Wabash ave.	139	8
Dearborn st.	Lake and South Water sts.	300	6
Dearborn st.	Across Madison st.	48	6
Dearborn st.	Thirty-fourth and Thirty-fifth sts.	650	4
Dashiel st.	Twenty-sixth and Twenty-eighth sts.	643	6
Emerald st.	Thirty-first and Thirty-third sts.	1,336	4
Emerald st.	Thirty-sixth and Thirty-ninth sts.	1,970	4
Emerald ave.	Archer ave. and Twenty-eighth st.	1,445	6
Exposition building.	Michigan ave. into grounds.	72	4
Forest ave.	Thirty-fifth st. and southward.	807	6
Farrel st.	Thirty-first st. and northward.	540	4
Garibaldi st.	Twenty-sixth and Twenty-seventh sts.	535	6
Groveland park.	Cottage Grove ave. and eastward.	540	4
Harrison st.	State st. east of Wabash ave.	501	12
Hanover st.	Twenty-fifth st. south of Twenty-sixth st.	716	12
Hickory st.	Main and Mary sts.	680	8
Indiana ave.	Thirty-third and Thirty-fifth sts.	776	6
Jackson st.	Across Wabash ave.	153	6
Jackson st.	Across State st.	133	6
Joseph st.	Hickory st. and Archer ave.	485	6
Kossuth st.	Sanger st. and Stewart ave.	1,457	4
Lock st.	Thirty-first st. and northward.	150	8
Laurel st.	Cayuga and Oneida sts.	750	8
Lyman st.	Lock st. and Haines court.	563	6
La Salle st.	Randolph and Adams sts.	1,986	36
Lowe ave.	Thirty-fifth and Thirty-sixth sts.	630	4
Lowe ave.	Twenty-sixth st. and southward.	300	6
Lake ave.	Oakwood and Pier sts.	950	6
Mulligan st.	Paulina st. and westward.	18	4
Monroe st.	Wabash ave. and Dearborn st.	700	6
Monroe st.	Franklin st. and Fifth ave.	817	8
Amount carried forward..		33,755	

SOUTH DIVISION.—CONTINUED.

ON WHAT STREET.	BETWEEN WHAT STREETS.	Length in feet.	Dia- meter in inches.
	Amount brought forward..	33,755	
Market st.	Across Adams st.	75	8
Market st.	Monroe and Madison sts.	306	8
McGregor st.	To connect at Portland ave.	15	4
Napoleon place.	Garibaldi st. and Stewart ave.	306	6
Napoleon st.	Stewart ave. and Wallace st.	1,314	4
Oakwood ave.	Across Lake ave.	100	8
Onondaga st.	Halsted st. and westward.	689	6
Pitney ave.	Archer ave. and southward.	520	6
Paulina st.	Mulligan st. and southward.	520	6
Portland ave.	Twenty-third and Twenty-sixth sts.	1,682	12
Portland ave.	Twenty-ninth and Thirty-third sts.	1,400	6
Rhodes ave.	Thirty-third st. and northward.	158	6
South Water st.	Wabash and Michigan aves.	398	8
South Water st.	Wabash ave. and Clark st.	1,012	6
Shurtliff ave.	Thirty-first and Thirty-third sts.	984	4
South Park ave.	Thirty-fifth and Thirty-sixth sts.	250	6
Stewart ave.	To connect Napoleon place.	65	8
Stanton ave.	Bryant ave. and northward.	202	6
State st.	Across Twenty-third st.	12	8
Twenty-second st.	Dearborn st. and Wentworth ave.	890	6
Twenty-third st.	Portland and Wabash aves.	1,865	12
Twenty-fourth st.	To connect at Portland ave.	16	8
Twenty-fifth st.	Hanover and Portland aves.	1,000	12
Twenty-sixth st.	To connect at Hanover st.	24	8
Twenty-seventh st.	Garibaldi st. and Portland ave.	300	4
Twenty-eighth st.	Stewart ave. and Wallace st.	1,286	6
Thirtieth st.	Portland and Stewart aves.	626	6
Thirty-first st.	Wabash and Michigan aves.	462	6
Thirty-first st.	Broad and Lock sts.	360	8
Thirty-first st.	Halsted and Emerald sts.	360	8
Thirty-second st.	Wabash and Michigan aves.	426	8
Thirty-second st.	Broad and Ulman sts.	1,280	6
Thirty-third st.	Cottage Grove and Rhodes aves.	550	6
Thirty-third st.	Across Wabash ave.	143	6
Thirty-third court.	Auburn and Laurel sts.	664	4
Thirty-fourth st.	Across Wabash ave.	143	6
Thirty-fourth st.	Auburn and Laurel sts.	660	6
Thirty-sixth st.	Dashiel and Wallace sts.	630	6
Thirty-seventh st.	Halsted and Butterfield sts.	5,078	8
Thirty-seventh st.	Ellis and Lake aves.	450	8
Thirty-ninth st.	Cottage Grove ave. and westward.	500	12
Thirty-ninth st.	Across Lake ave.	48	8
Ulman st.	Thirty-second and Thirty-third sts.	750	8
Vincennes ave.	Thirty-eighth and Thirty-ninth sts.	350	6
Van Buren st.	Wabash ave. and eastward.	68	6
Vernon ave.	Oak ave. and Thirty-seventh st.	384	4
Washington st.	State st. and Wabash ave.	525	6
Wabash ave.	Madison and Harrison sts.	2,929	8
Wabash ave.	Thirty-fifth st. and north to connect.	1,460	6
Wentworth ave.	Thirty-seventh st. and northward.	675	6
Wentworth ave.	Twenty-third st. and northward.	24	4
Wallace st.	Twenty-sixth st. and Napoleon place.	957	6
		70,246	
	Hydrants.....	8,950	
	Total	74,196	

WEST DIVISION.

ON WHAT STREET.	BETWEEN WHAT STREETS.	Length in Feet.	Diam- eter in inches.
Ann st.	Fulton st. and south.	828	6
Ambrose st.	Wood and Robey sts.	1,416	4
Allport ave.	Eighteenth and Twenty-first sts.	1,304	4
Arnold st.	Thirty-eighth st. and south.	60	4
Ashland ave.	North ave. and Clybourne place.	1,500	16
Ashland ave.	Milwaukee ave. and Blackhawk st.	1,080	16
Ashland ave.	Twelfth and Fifteenth sts.	1,988	8
Alley west of Center ave.	Bismarck and Second sts.	170	6
Armour st.	Fourth st. and northward.	50	6
Ashley st.	Wood and Robey sts.	1,359	4
Ada st.	Depot place and south of Fulton st.	790	8
Adams st.	Seeley and Hoyne aves.	334	6
Blue Island ave.	Twenty-first and Laffin sts.	266	6
Blue Island ave.	Across Western ave.	70	8
Bismarck st.	Noble st. and eastward.	600	6
Bismarck st.	End of Pipe and Carpenter school.	290	4
Bickerdike st.	Fourth st. and northward.	50	6
Cicero court	Harrison st. and northward.	96	6
Cicero court	West Congress st. and southward.	382	4
Coulter st.	Western ave. and westward.	771	6
Catherine st.	Loomis and Paulina sts.	1,976	6
Coolidge st.	Ashland ave. and Wood st.	1,294	4
California ave.	Fulton st. and northward.	350	8
Carroll st.	Hoyne and Robey sts.	600	4
Commercial st.	Wabansia ave. and northward.	680	6
Clarinda st.	Samuel st. and westward.	32	6
Clarinda st.	Holt st. and Ashland ave.	710	6
Cornelia st.	Samuel st. and westward.	32	6
Cleaver st.	Division st. and northward.	644	6
Cork st.	Paulina st. and Ashland ave.	670	4
Courtland st.	Leavitt st. and westward.	276	6
De Kalb st.	Flournoy st. and southward.	309	4
Dickson st.	North and Wabansia aves.	670	6
Dickson st.	Wabansia ave. and northward.	316	4
Division st.	Milwaukee ave. and westward.	100	8
Dean st.	Brigham st. and Ridgville road.	492	4
Dudley st.	North ave. and northward.	82	6
Eighteenth place.	Morgan and May sts.	995	4
W. Eighteenth st.	May and Nutt sts.	729	6
W. Eighteenth st.	Loomis st. westward.	600	6
W. Eighteenth st.	Morgan and Halsted sts.	1,362	6
W. Eighteenth st.	Robey and Hoyne sts.	944	6
W. Eighteenth st.	At intersection of Morgan st.	175	8
W. Eighteenth st.	Throop st. and Blue Island ave.	595	6
W. Erie st.	Noble and Reuben sts.	1,275	6
W. Erie st.	Robey st. and westward.	876	4
Emily st.	Samuel st. and westward.	32	6
Evergreen st.	Milwaukee ave. and southward.	144	6
Elk Grove st.	North ave. and southward.	162	6
Emma st.	Ashland ave. and eastward.	360	6
Fontenoy place	Milwaukee ave. and southwest.	392	6
Fifth st.	Chicago ave. and George st.	315	6
Flournoy st.	Robey and Hoyne sts.	700	6
Flournoy st.	Robey st. and westward.	30	4
Amount carried forward..		31,848	

THE BOARD OF PUBLIC WORKS.

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WEST DIVISION.—CONTINUED.

ON WHAT STREET.	BETWEEN WHAT STREETS.	Length in feet.	Dia- meter in inches.
	Amount brought forward..	31,848	
Fulton st.	Maplewood and California aves.	1,651	12
Fairfield st.	Fulton st. and northward.	400	4
Grove st.	George st. and northward.	265	6
Girard st.	Milwaukee ave. and northward.	65	6
Girard st.	Across North av.	97	6
Honore st.	Across Ogden av.	122	6
Howard st.	Robey and Hoyne sts.	670	4
Hoyne st.	Flournoy st. and southward.	344	6
Hoyne st.	Erie st. and northward.	58	8
Hoyne st.	Second st. and northward.	53	8
Harrison st.	Cicero court and Western ave.	1,072	8
Harrison st.	Hoyne and Leavitt sts.	704	8
Harrison st.	Across Ogden ave.	100	8
Henry st.	Lafin st and Ashland ave.	686	4
Henry st.	Ashland ave. and westward.	84	6
Henry st.	Throop and Loomis sts.	625	4
Hamilton ave.	Jackson st. and southward.	309	4
Hamilton st.	Division st. and northward.	837	6
Hinman st.	Lincoln and Robey sts.	705	4
Hinman st.	Leavitt and Oakley sts.	641	4
Harbine st.	Wood and Hoyne sts.	2,089	8
Hastings st.	Wood and Lafin sts.	1,824	4
Houston st.	N. line Milwaukee ave. and southward.	160	6
Hubbard st.	Oakley st. and Western ave.	720	6
Ingraham st.	Noble st. and eastward.	360	4
Jackson st.	Halsted and Morgan sts.	1,050	8
Jackson st.	Across Ogden ave.	112	8
Jackson st.	Morgan st. and westward.	70	6
Jefferson st.	Across Lake st.	95	6
Jane st.	Samuel st. and westward.	24	6
Jane st.	Ashland and Milwaukee aves.	542	4
Jane st.	Across Wood st.	90	6
Lincoln st.	Across Walnut st.	42	6
Lincoln st.	Across Ogden ave.	105	6
Lincoln st.	To connect at Ambrose.	50	6
Lincoln st.	Adams and Jackson sts.	525	6
Lincoln st.	Milwaukee ave. and southward.	84	6
Lincoln st.	Iowa and Thomas sts.	1,350	6
Lessing st.	Chicago ave. and George st.	250	6
Lessing st.	Chicago ave. and George st.	100	4
Lull place	Milwaukee ave. and southward.	175	6
Leavitt st.	Milwaukee ave. and northward.	100	6
Leavitt st.	Milwaukee and Courtland aves.	874	8
Leavitt st.	Harrison and Van Buren sts.	797	8
Lake st.	Rockwell and east to connect.	645	6
Lake st.	Across Canal st.	90	6
Lake st.	Across Union st.	100	8
Lafin st.	Harbine st. and Blue Island ave.	442	6
Lafin st.	Taylor st. and northward.	1,101	6
Lexington st.	Hoyne st. and westward.	365	4
Monroe st.	Webster ave. and west of Campbell ave.	803	6
Monroe st.	Leavitt and Oakley sts.	328	6
Monroe st.	Wood and Honore sts.	286	4
	Amount carried forward..	56,959	

WEST DIVISION.—CONTINUED.

ON WHAT STREET.	BETWEEN WHAT STREETS.	Length in feet.	Dia- me- ter in inches.
	Amount brought forward..	56,959	
Madison st.	California ave. and westward.	105	8
Morgan st.	Walsh and Luke sts.	511	8
Morgan st.	Chicago ave. and Pratt st.	480	6
McMullen st.	Centre and Fisk sts.	862	4
Moore st.	Wood and Lincoln sts.	569	6
Mitchell st.	Paulina st. westward.	748	6
Mitchell st.	Morgan st. and Stewart ave.	3,807	8
Mautine court.	Milwaukee ave. and southward.	355	4
McHenry st.	Rawson st. and North ave.	690	6
Milwaukee ave.	Western ave. and southeast to connect.	3,000	6
McReynolds st.	Wood and Paulina sts.	560	6
Nutt court.	Luke and Walsh sts.	565	4
Noble st.	Erie and Second sts.	247	6
North ave.	Wood and Dana sts.	4,316	8
Owasco st.	Western ave. and westward.	294	4
Oakley st.	Twenty-first and Twenty-second sts.	678	6
Oakley st.	Hubbard and Kinzie sts.	350	6
Osborne st.	Indiana and Fourth sts.	534	4
Ogden ave.	Adams and Twelfth sts.	5,117	6
Paulina st.	Blue Island ave. and southward.	1,220	6
Page st.	Hubbard st. and northward.	264	6
Rebecca st.	Loomis and Lavin sts.	881	6
Rebecca st.	Ashland ave. and Wood st.	1,307	4
Robey st.	Harrison and McGrath sts.	596	6
Robey st.	Across Ogden ave.	109	6
Robey st.	Blue Island ave. and northward.	54	6
Robey st.	Seventeenth and Twenty-first sts.	1,678	6
Robey st.	Ashley st. and northward.	43	6
Robey st.	Greenwich st. and Ewing place.	1,980	8
Robey st.	Indiana and Hubbard sts.	400	6
Rawson st.	McHenry st. and westward.	32	6
Rumsey st.	Emily and Jane sts.	828	4
Ridgville road.	Armitage road and Clybourn court.	700	6
Ridgville road	North ave. and southward.	835	6
Rice st.	Wood and Lincoln sts.	678	4
Smith ave.	Paulina and Wood sts.	509	4
Stewart ave.	Liberty and Mitchell sts.	217	6
Sampson st	Paulina st. and westward.	587	6
Sixteenth st. (n. side)	Across Seward st.	166	6
Sixteenth st. (s. side.)	Across Seward st.	117	4
Samuel st.	Chicago ave. and Division st.	2,597	4
Sheldon st.	Kinzie and Hubbard sts.	366	4
Snell st.	Chicago ave. and Second st.	600	4
Stein st.	Redfield st. and northward.	270	4
Thomas st.	Wood st. and westward.	40	6
Twelfth st.	Lytle st. and westward.	258	16
Twenty-first st.	Morgan and Fiske sts.	413	6
Twenty-first st.	Hoyne st. and Western ave.	1,922	6
Twenty-first st.	Blue Island and Ashland aves.	550	6
Twenty-second st.	Leavitt and Oakley sts.	666	8
Twenty-second st.	Ashland ave and Wood st.	1,339	6
Twenty-second st.	Wood and Lincoln sts.	651	8
Throop st.	Twelfth and Sixteenth sts.	2,731	12
	Amount carried forward..	105,794	

THE BOARD OF PUBLIC WORKS.

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WEST DIVISION.—CONTINUED.

ON WHAT STREET.	BETWEEN WHAT STREETS.	Length in feet.	Dia- meter in inches.
	Amount brought forward..	105,794	
Throop st.	In feeder at Sixteenth st.	24	8
Throop st.	In feeder at Hastings st.	26	6
Throop st.	In feeder at Mitchell st.	26	6
Throop st.	Monroe st. and southward.	338	6
Upton st.	Across Milwaukee ave.	120	6
Union place.	Harrison and Tyler sts.	382	4
Van Buren st.	Ogden ave. and eastward.	699	6
Van Buren st.	Western ave. and westward.	406	6
Van Buren st.	Paulina st. and westward.	196	6
Vanhorn st.	Robey st. and Hoyne ave.	670	4
West Congress st.	Western ave. and Cicero court.	1,207	6
West Congress st.	Across Peoria st.	96	6
West Congress st.	Across Ogden ave.	95	6
West Congress st.	Robey and Lincoln sts.	409	4
West Congress st.	Paulina st. and Marshfield ave.	334	6
Walnut st.	Ashland ave. and westward.	263	4
Walnut st.	Wood st. and westward.	20	4
Wilcox ave.	Campbell ave. and eastward.	322	6
Walsh st.	Leavitt and Robey sts.	1,380	4
Walsh st.	Halsted and Morgan sts.	1,267	8
Warren ave.	Leavitt and Oakley sts.	612	4
Washtenaw ave.	Fulton st. and northward.	401	6
Winchester ave.	Van Buren and West Congress sts.	484	8
Wabansia ave.	Wood and Paulina sts.	690	6
West Huron st.	Robey st. and Hoyne ave.	830	4
West Huron st.	Temple and Noble sts.	545	4
Wood st.	Wabansia ave. and northward.	10	8
Wood st.	Julian st. and northward.	400	8
Wood st.	Across Milwaukee ave.	184	8
Wood st.	Division and Thomas sts.	744	8
Western ave.	North ave. and southward.	28	8
Wicker Park.	Fontenoy place to end of pipe.	22	6
West Ohio st.	Noble st. and Ashland ave.	1,170	8
West Ohio st.	Robey st. and Hoyne ave.	660	6
		120,804	
	Hydrants.....	6,075	
	Total	126,879	

NORTH DIVISION.

ON WHAT STREET.	BETWEEN WHAT STREETS	Length in feet.	Dia- meter in inches.
"B" st.	Dominick st. and Southport ave.	450	4
Burling st.	Webster and Belden aves.	596	4
Burling st.	Centre and Sophia sts.	640	4
Bissell st.	Across Centre st.	50	6
Bremer st.	Oak st. and Chicago ave.	1,350	8
Church st.	Blackhawk st. and southward.	633	4
Clybourn ave.	Southport ave. and Ward st.	740	6
Clybourn ave.	Across Racine ave.	130	6
Clybourn place.	Clybourn and Southport aves.	1,480	16
Centre st.	Halsted st. and Racine ave.	2,680	16
Crooked st.	Clybourn ave. and eastward.	54	6
Cooper st.	Fullerton and Clybourn aves.	560	4
Dayton st.	Clay st. and Webster ave.	2,206	4
Fremont st.	Clay st. and Webster ave.	1,494	6
Fabius st.	Centre st. and northward.	44	6
Fabius st.	Webster ave. and northward.	78	6
Franklin st.	Across Pearson st.	70	6
Fullerton ave.	High and Perry sts.	330	8
Gardner st.	Halsted st. and eastward.	84	4
Hills st.	Across Franklin st.	185	6
Herndon st.	Webster ave. and northward.	56	6
Hawthorn ave.	Clybourn place and northward.	94	6
Kingsbury st.	Superior st. and Chicago ave.	360	4
Kroeger st.	Racine ave. and southeast to connect.	1,044	4
Lincoln ave.	Belden and Webster aves.	940	6
Larrabee st.	Centre and Sophia sts.	524	6
Lewis st.	Webster ave. and northward.	56	6
Mohawk st.	Center and Sophia sts.	324	6
North Water st.	Pine st. and westward.	100	12
Osgood st.	Centre st. and northward.	44	6
Oak st.	Across Bremer st.	80	8
Perry st.	Clybourn and Fullerton aves.	982	6
Pearson st.	Market and Franklin sts.	360	6
Rush st.	In water pipe tunnel.	950	24
Racine ave.	Centre st. and Clybourn ave.	312	16
Racine ave.	Centre st. and northward.	56	8
Racine ave.	Webster ave. and northward.	50	8
Superior st.	St. Clair st. and eastward.	200	4
Sheffield ave.	Centre st. and northward.	100	6
Sophia st.	Howe and Orchard sts.	308	6
Shaughnessy st.	Goethe st. and northward.	212	4
Southport ave.	Clybourn place and Webster ave.	1,612	12
Stone st.	Scott and Division sts.	350	6
Webster ave.	Halsted and Fremont sts.	650	8
Webster ave.	Fabius and Dominick sts.	2,485	8
Willow st.	Sheffield ave. and Bissell st.	347	6
Ward st.	Webster and Belden aves.	657	4
		26,957	
	Hydrants.....	1,375	
		28,332	

The whole length of pipe laid in city during the year was
229,407 feet, 43 $\frac{2367}{288}$ miles.

PIPES TAKEN UP AND ABANDONED.

The following is a list of the pipes which during the year, were taken up out of the ground, or abandoned as not being worth the amount it would cost to take them up, where larger ones were laid, viz :

TAKEN UP OR ABANDONED.	LOCATION OF PIPES.	Length in feet.	Dia- meter in inches.
Taken up.	Lake ave. bet. Oakwood and Pier sts.	1,000	4
Taken up.	Twenty-third st. bet. Portland and Wentworth aves.	750	6
Taken up.	Wabash ave. bet. Monroe and Madison sts.	750	4
Abandoned.	Wabash ave. bet. Madison and Harrison sts.	2,179	4
Abandoned.	South Water st. bet. Wabash ave. and Clark st.	1,012	3
Taken up.	Ashland ave. bet. Twelfth st. and southward.	449	6
Taken up.	Throop st. bet. Blue Island ave. and southward.	140	6
Taken up.	W. Fifteenth st. bet. Loomis st. and southward.	180	4
Taken up.	Sangamon st. bet. Laffin st. and southward.	75	4
Taken up.	W. Fourteenth st. bet. Stewart ave. and Halsted st.	2,693	4
Taken up.	Bremer st. bet. Chicago ave. and Oak st.	1,350	4
Taken up.	Southport ave. bet. Clybourn pl. and Webster ave.	1,612	4
Taken up.	Clybourn place bet. Southport and Clybourn aves.	1,480	6
Taken up.	Ashland ave. bet. Blackhawk st. and Milwaukee ave.	1,080	6
		14,750	

The total length of pipes laid in the city at this date, as nearly as can be ascertained, is as follows, viz :

	FEET.
24 inch wrought iron pipe, Rush street.....	530
24 inch wrought iron pipe, Twelfth street.....	258
36 inch cast iron main pipe.....	9,605
28 inch cast iron main pipe.....	160
24 inch cast iron main pipe.....	57,980
16 inch cast iron main pipe....	43,199
12 inch cast iron main pipe.....	52,011
10 inch cast iron main pipe.....	7,862
8 inch cast iron main pipe.....	253,944
6 inch cast iron main pipe.....	702,314
4 inch cast iron main pipe.....	701,529
3 inch cast iron main pipe.....	26,213
	1,855,605

Or $351\frac{2325}{280}$ miles.

HYDRANTS.

During the year ending March 31st, 1874, the following new hydrants were established, viz :

SOUTH DIVISION.

- One southeast corner Archer avenue and Lime street.
- One northeast corner Adams and State streets.
- One northeast corner alley between Wabash and Michigan avenues and Randolph street.
- One northeast corner alley between Lake and Randolph streets and Wabash avenue.
- One southeast corner alley between State street and Wabash avenue and Washington street.
- One northwest corner alley between Lake and South Water streets and Wabash avenue.
- One northwest corner alley between State street and Wabash avenue and Harrison street.
- One northwest corner Arnold and Thirty-ninth streets.
- One northwest corner Arnold and Twenty-sixth streets.
- One southwest corner Arnold and Twenty-seventh streets.
- One northwest corner Arnold and Thirty-eighth streets.
- One northwest corner Archer avenue and Hough court.
- One southwest corner Auburn and Thirty-third streets.
- One southwest corner Auburn street and Thirty-third court.
- One northwest corner Auburn street and Thirty-fifth court.
- One southeast corner Adams and LaSalle streets.
- One southwest corner Burnside and Thirty-fifth streets.
- One northwest corner Burnside and Thirty-sixth streets.
- One northwest corner Burnside and Thirty-seventh streets.
- One southwest corner Burnside and Thirty-eighth streets.
- One northwest corner Burnside and Thirty-ninth streets.
- One northwest corner Butterfield and Thirty-ninth streets.
- One northwest corner Butterfield and Thirty-eighth streets.
- One northwest corner Butterfield and Thirty-sixth streets.
- One southwest corner Bonfield and Hickory streets.
- One northeast corner Bryant and Stanton avenues.
- One northwest corner Clark street and Couch place.
- One southeast corner Clark and Randolph streets.

One southwest corner Clark street and alley between Madison and Washington streets.

One northwest corner Clark and Jackson streets.

One northeast corner Clark street and alley between Monroe and Adams streets.

One west side Clark between Monroe and Madison streets.

One east side Clark between Jackson and Van Buren streets.

One east side Clark between Van Buren and Harrison sts.

One west side Clark between Van Buren and Harrison sts.

One southeast corner Calumet avenue and Thirty-first street.

One southwest corner Dashiell and Twenty-sixth streets.

One northwest corner Dashiell and Twenty-eighth streets.

One east side Dearborn street 100 feet north of Lake.

One northwest corner Emerald avenue and Thirty-third street.

One west side Emerald ave. between Thirty-first and Thirty-third st.

One northwest corner Emerald avenue and Thirty-seventh st.

One northwest corner Emerald avenue and Thirty-ninth street.

One northwest corner Emerald avenue and Thirty-eighth street.

One northwest corner Emerald avenue and Kossuth street.

One northwest corner Emerald avenue and Twenty-sixth street.

One northwest corner Fourteenth street and Third avenue.

One west side Forest avenue 500 feet south of Thirty-fifth street.

One northwest corner Forest avenue and Thirty-fifth street.

One northeast corner Farrel and Thirty-first streets.

One southwest corner Garibaldi and Twenty-sixth streets.

One northwest corner Garibaldi and Twenty-seventh streets.

One northwest corner Hickory and Farrel streets.

One northwest corner Hickory and Main streets.

One northwest corner Harrison street and Wabash avenue.

One southeast corner Harrison and State streets.

One northwest corner Hanover and Kossuth sts.

One northeast corner Hanover and Thirty-seventh streets.

One northwest corner Indiana avenue and Thirty-fourth streets.

One southwest corner Joseph and Hickory streets.

One southeast corner Jackson and State streets.

One northwest corner Kossuth and Sanger streets.

One northwest corner Lock and Thirty-first streets.

One northwest corner Lyman and Arch streets.

One northwest corner Lyman street and Haines court.

One southeast corner La Salle and Washington streets.

- One northeast corner Lancaster avenue and Benson streets.
- One northwest corner Lancaster avenue and Fox streets.
- One northwest corner Lake avenue and Thirty-ninth street.
- One northeast corner Michigan avenue and Jackson street.
- One east line Michigan avenue on Goodrich's dock.
- One northeast corner Monroe and Franklin streets.
- One southwest corner Monroe and Franklin streets.
- One south side Monroe street, 100 feet west of Fifth avenue.
- One northwest corner Market and Monroe streets.
- One northeast corner Michigan avenue and Thirty-first streets.
- One northeast corner Napoleon place and Stewart avenue.
- One northwest corner Napoleon place and Hanover street.
- One northwest corner Napoleon place and Butler street.
- One northeast corner Napoleon place and Wallace street.
- One northeast corner (Oneida) 33d court and Laurel street.
- One northwest corner Portland avenue and Thirty-first street.
- One west side Portland ave. between Thirty-first and Thirty-third sts.
- One northwest corner Paulina and Thirty-third streets.
- One northwest corner Quarry street and Archer avenue.
- One northwest corner Rhodes avenue and Thirty-fifth street.
- One southwest corner Rhodes and Crittenden avenues.
- One northwest corner Rhodes avenue and Thirty-third street.
- One northeast corner Randolph and State streets.
- One southwest corner Randolph and Dearborn streets.
- One northeast corner Randolph and Dearborn streets.
- One southeast corner Randolph street and alley between State street and Wabash avenue.
- One east side State street opposite Polk street.
- One southeast corner State and South Water streets.
- One northwest corner State and Madison streets.
- One west side State street between Madison and Monroe streets.
- One southeast corner State and Monroe streets.
- One west side State street between Monroe and Adams streets.
- One northwest corner State and Quincy streets.
- One northwest corner South Water street and Alley between Wabash and Michigan avenues.
- One southeast corner South Water and Dearborn streets.
- One southeast corner South Water and Clark streets.
- One northwest corner Twelfth and State streets.
- One northeast corner Twenty-second and Arnold streets.

- One northeast corner Twenty-third street and Portland avenue.
- One southwest corner Twenty-third and Butterfield streets.
- One northeast corner Twenty-third street and Wentworth avenue.
- One northeast corner Twenty-fifth street and Hanover street.
- One northeast corner Twenty-fifth street and Portland avenue.
- One northeast corner Twenty-fifth street and Stewart avenue.
- One northwest corner Twenty-eighth and Butler streets.
- One northwest corner Twenty-eighth and Hanover streets.
- One northwest corner Twenty-ninth street and Vernon avenue.
- One northwest corner Thirtieth street and Portland avenue.
- One northeast corner Thirtieth and Garibaldi streets.
- One northwest corner Thirtieth street and Stewart avenue.
- One northwest corner Thirty-first street and Emerald avenue.
- One northeast corner Thirty-first and State streets.
- One northwest corner Thirty-first street and Indiana avenue.
- One northwest corner Thirty-fourth and Auburn streets.
- One northeast corner Thirty-fourth and Laurel streets.
- One southwest corner Thirty-fifth and Butterfield streets.
- One northeast corner Thirty-seventh and Butterfield streets.
- One northeast corner Thirty-seventh and Arnold streets.
- One northeast corner Thirty-seventh and Dashiell streets.
- One northeast corner Thirty-seventh street and Wentworth avenue.
- One northeast corner Thirty-seventh and Wallace streets.
- One northwest corner of Thirty-seventh street and Portland avenue.
- One northeast corner Thirty-seventh street and Lowe avenue.
- One northeast corner Thirty-seventh street and Stewart avenue.
- One southwest corner Ulman street and Lancaster avenue.
- One southwest corner Ulman and Springer streets.
- One southwest corner Ulman and Thirty-third streets.
- One northwest corner Van Buren street and Michigan avenue.
- One northwest corner Wallace and Twenty-eighth streets.
- One east side Wabash ave. between Randolph and Washington sts.
- One northwest corner Wabash avenue and Randolph street.
- One west side Wabash ave. between Madison and Washington sts.
- One northwest corner Wabash avenue and Lake street.
- One west side Wabash avenue between Monroe and Madison streets.
- One southeast corner Wabash avenue and Monroe street.
- One northwest corner Wabash avenue and Thirtieth street.
- One west side Wabash ave. between Thirtieth and Twenty-ninth sts.
- One west side Wabash ave. between Adams and Monroe sts.

One southeast corner Wabash avenue and Adams street.
One west side Wabash ave. between Adams and Jackson sts.
One southeast corner Wabash avenue and Madison street.
One southeast corner Wabash avenue and Jackson street.
One southeast corner Wabash avenue and Van Buren street.
One west side Wabash ave. between Van Buren and Jackson sts.
One southeast corner Wabash avenue and Congress street.
One west side Wabash ave. between Congress and Harrison sts.
One west side Wabash ave. between Congress and Van Buren sts.
One southwest corner Wabash avenue and Thirty-second streets.
One northwest corner Wabash avenue and Thirty-third streets.
One northwest corner Wabash avenue and Thirty-fourth streets.
One northeast corner Washington and State streets.

Total in South division, 157.

WEST DIVISION.

One northwest corner Ashland and Wabansia avenues.
One southwest corner Ashland avenue and Hastings street.
One southwest corner Ashland avenue and Henry street.
One northwest corner Armour and Erie streets.
One northwest corner Armour and West Ohio streets.
One northwest corner Allport avenue and Evans streets.
One northwest corner Allport avenue and Harbine street.
One northwest corner Ambrose and Lincoln streets.
One northwest corner Adams street and Seeley avenue.
One southwest corner Ada street and Washington avenue.
One southwest corner Ada street and Depot place.
One southeast corner of Ada and Fulton streets.
One north side of Bismark street 400 feet east of Noble.
One southwest corner Burlington and Sixteenth streets.
One northeast corner Blue Island avenue and Lincoln street.
One northwest corner Blue Island avenue and Robey street.
One northwest corner Clarinda and Samuel streets.
One northwest corner Cornelia and Samuel streets.
One northwest corner Cleaver and Division streets.
One northeast corner Clarinda street and Ashland avenue.
One northeast corner Cork and Paulina streets.
One northwest corner Clybourn place and Girard street.
One northeast corner Clybourn place and Elk Grove street.

One southeast corner Center avenue and Twenty-first street.
One northwest corner Centre avenue and Twelfth street.
One northwest corner Centre avenue and Hastings street.
One northwest corner Canal and Randolph streets.
One northeast corner Canal and Twelfth streets.
One northwest corner Canal and Lake streets.
One northwest corner Cicero court and Harrison streets.
One southwest corner Clinton and Lake streets.
One northwest corner Coulter street and Western avenue.
One north side of Coulter street 770 feet west of Western avenue.
One northwest corner of Thirteenth place and Ashland avenue.
One northeast corner Thirteenth place and Wood street.
One northwest corner Thirteenth place and Paulina street.
One northwest corner West Congress street and Union place.
One northwest corner West Congress street and Winchester ave.
One northwest corner West Congress street and Marshfield ave.
One northeast corner Campbell avenue and West Congress street.
One northwest corner West Erie and Bickerdike streets.
One northwest corner Emily and Samuel streets.
One southwest corner Evergreen street and Milwaukee avenue.
One northwest corner West Eighteenth and Laflin streets.
One northeast corner West Eighteenth and Johnson streets.
One southwest corner West Eighteenth and Brown streets.
One northwest corner West Eighteenth and Robey streets.
One northeast corner West Eighteenth street and Hoyne avenue.
One northeast corner West Eighteenth and May streets.
One northeast corner Eighteenth place and May street.
One northwest corner West Fifteenth and Laflin streets.
One northwest corner West Fifteenth street and Ashland avenue.
One northeast corner West Fifteenth and Paulina streets.
One southwest corner Fontenoy place and Milwaukee avenue.
One northwest corner Fulton and Wood streets.
One northwest corner West Fourteenth street and Ashland ave.
One northwest corner West Fourteenth and Wood streets.
One northwest corner West Fourteenth street and Stewart avenue.
One northeast corner West Fourteenth and Canal streets.
One southeast corner West Fourteenth and Jefferson streets.
One northwest corner West Fourteenth and Union streets.
One northeast corner West Fourteenth and Halsted streets.
One northwest corner West Fourteenth street Newbury avenue.

One northwest corner West Fourteenth and Brown streets.
One northwest corner West Fourteenth and Morgan streets.
One northeast corner West Fourteenth and Holden streets.
One northwest corner Fulton street and Washtenaw avenue.
One northwest corner Fulton street and Fairfield avenue.
One northwest corner Fulton street and California avenue.
One northwest corner Fulton street and Talman avenue.
One northwest corner Flourney and Robey streets.
One northwest corner Flourney and Dekalb streets.
One northwest corner Flourney street and Hoyne avenue.
One northeast corner Girard street and Milwaukee avenue.
One southwest corner Houston street and Milwaukee avenue.
One northwest corner Hoyne avenue and Erie street.
One northwest corner Hoyne avenue and West Huron street.
One northwest corner Hoyne and Lexington avenues.
One northwest corner West Huron and Snell streets.
One south side of West Huron street, 250 feet west of Rucker.
One east side of Holt street, opposite Clarinda.
One northwest corner Hubbard and Diller streets.
One northwest corner Hubbard and Page streets.
One southwest corner Hamilton avenue and Ellen streets.
One west side Hamilton avenue between Ellen and Division sts.
One southwest corner Holden and Twelfth streets.
One southwest corner Halsted and Washington streets.
One northwest corner Harbine street and Blue Island avenue.
One northwest corner Harbine and Robey streets.
One northeast corner Harbine street and Hoyne avenue.
One northwest corner Harbine and Lincoln streets.
One northeast corner Henry and Loomis streets.
One northwest corner Hinman and Leavitt streets.
One northwest corner Hinman and Robey streets.
One northeast corner Howard street and Hoyne avenue.
One northwest corner Harrison street and Western avenue.
One northeast corner Harrison street and Union place.
One northwest corner Harrison street and Hoyne avenue.
One northwest corner Harrison and Leavitt streets.
One northeast corner Hastings and Paulina streets.
One northeast corner Ingraham and Noble streets.
One southwest corner Johnson and Twelfth streets.
One northwest corner Johnson and West Fourteenth streets.

- One southwest corner Jefferson and Lake streets.
- One northwest corner Jefferson and West Fourteenth streets.
- One southwest corner Jefferson and Twelfth streets.
- One southeast corner Jackson and Green streets.
- One southeast corner Jackson and Morgan streets.
- One northeast corner Jackson and Sangamon streets.
- One southwest corner Lull place and Milwaukee avenue.
- One southwest corner Lincoln street and Milwaukee avenue.
- One southwest corner Lincoln and Thomas streets.
- One northwest corner Lincoln and Augusta street.
- One northwest corner Leavitt and Churchill streets.
- One northwest corner Leavitt and Greenwich street.
- One northwest corner Leavitt and Courtland streets.
- One northwest corner Leavitt and West Congress streets.
- One southeast corner Lake and Desplaines streets.
- One southeast corner Lake and Union streets.
- One southwest corner Lake and Halsted streets.
- One northwest corner Lake and Rockwell streets.
- One northeast corner Lake and Rockwell streets.
- One northwest corner Laffin and Taylor streets.
- One northwest corner Laffin and Polk streets.
- One southwest corner Mautine court and Milwaukee avenue.
- One northwest corner Milwaukee avenue and Division street.
- One southeast corner Milwaukee and Western avenues.
- One north side Milwaukee ave. between Division ave. and Upton st.
- One north side Milwaukee avenue between Leavitt and Upton sts.
- One northwest corner Milwaukee avenue and Leavitt streets.
- One north side Milwaukee avenue between Leavitt street and Wabansia avenue.
- One northwest corner Milwaukee and Wabansia avenues.
- One north side Milwaukee avenue between North and Wabansia.
- One northwest corner Maxwell and Stewart streets.
- One northwest corner Maxwell and Jefferson streets.
- One northwest corner Monroe street and Campbell avenue.
- One northeast corner Monroe street and Irving place.
- One northeast corner McMullen and May streets.
- One west side Millard avenue 150 feet south of Ogden avenue.
- One northwest corner Morgan and Pratt streets.
- One northwest corner Morgan and Jackson streets.
- One southeast corner Morgan street and Chicago avenue.

One southwest corner Morgan and West Eighteenth streets.
One northwest corner Morgan and Twenty-first streets.
One south side Madison, at No. 24 engine house.
One northeast corner McReynolds and Wood streets.
One west side North May, at end of pipe north of George st.
One northwest corner Noble and Bismarck streets.
One northwest corner North avenue and Elk Grove street.
One northwest corner North avenue and Girard streets.
One northwest corner North avenue and Dudley street.
One northwest corner North and Milwaukee avenues.
One northwest corner North and Hoyne avenues.
One northwest corner North avenue and Leavitt street.
One northwest corner North avenue and Shober street.
One northwest corner North avenue and Oakley street.
One northeast corner North and Western avenues.
One southwest corner North avenue and Dana street.
One northwest corner West Nineteenth and Brown streets.
One northwest corner West Nineteenth and Morgan streets.
One northwest corner West Ohio and Bickerdike streets.
One northwest corner West Ohio street and Hoyne avenue.
One southwest corner Ogden avenue and Van Buren street.
One southwest corner Ogden avenue and Harrison street.
One northwest corner Ogden avenue and Polk street.
One northwest corner Ogden avenue and Taylor street.
One northeast corner Ogden avenue and Oakley street.
One southwest corner Oakley and Twenty-first streets.
One northwest corner Oakley and Twenty-second streets.
One northeast corner Polk street and Blue Island avenue.
One northeast corner Paulina and West Fourteenth streets.
One northwest corner Paulina and West Congress streets.
One west side of Paulina st., 600 feet south of Blue Island ave.
One west side of Paulina st., 1020 feet south of Blue Island ave.
One northwest corner Robey and Ashley streets.
One northwest corner Robey and Peterson streets.
One northwest corner Robey and Wabansia streets.
One northwest corner Robey and Cox streets.
One northwest corner Robey street and Wilmot avenue.
One northwest corner Robey and Churchill streets.
One northwest corner Robey and Greenwich streets.
One southwest corner Robey and Howard streets.

- One northwest corner Robey and Harrison streets.
- One southwest corner Ridgeville and Armitage roads.
- One northwest corner Ridgeville road and Keenon street.
- One northwest corner Rice and Wood streets.
- One northeast corner Rice and Lincoln streets.
- One northeast corner Rebecca and Paulina streets.
- One northeast corner Rebecca and Wood streets.
- One northeast corner Rebecca and Laffin streets.
- One southwest corner Samuel and Division streets.
- One northeast corner Smith avenue and Wood street.
- One south side of Sixteenth street, 75 feet west of Seward.
- One northwest corner Twelfth street and Blue Island avenue.
- One northeast corner Twelfth and Halsted streets.
- One northeast corner Thirteenth place and Wood street.
- One northeast corner Thirteenth street and Blue Island avenue.
- One northwest corner West Twentieth and Morgan streets.
- One northwest corner West Twentieth and May streets.
- One northeast corner West Twentieth and Leavitt streets.
- One northwest corner West Twentieth street and Hoyne avenue.
- One northwest corner West Twentieth and Wood streets.
- One northwest corner West Twentieth and Johnson streets.
- One northwest corner West Twentieth and Brown streets.
- One northwest corner Twenty-first and May streets.
- One northeast corner Twenty-first street and Western avenue.
- One northeast corner Twenty-first street and Centre avenue.
- One northwest corner Twenty-first street and Blue Island avenue.
- One northwest corner Twenty-first and Leavitt streets.
- One northwest corner Twenty-second and Paulina streets.
- One northwest corner Twenty-second and Leavitt streets.
- One northwest corner Twenty-second street and Ashland avenue.
- One northeast corner Twenty-second and Lincoln streets.
- One southwest corner Twenty-third street and Millard avenue.
- One south side Twenty-fourth st. between Jennesee and Millard aves.
- One northwest corner Temple and West Huron streets.
- One northwest corner Taylor and Halsted streets.
- One northeast corner Taylor and Jefferson streets.
- One northwest corner Throop and West Eighteenth streets.
- One southwest corner Throop and Twelfth streets.
- One southwest corner Throop and Sixteenth streets.
- One northwest corner Throop street and Thirteenth place.

One southwest corner Throop and Thirteenth streets.
One northwest corner Throop and Henry streets.
One southwest corner Throop and Fifteenth streets.
One northwest corner Throop and Harrison streets.
One northwest corner Upton street and Milwaukee avenue.
One southwest corner Upton street and Milwaukee avenue.
One northwest corner Vanhorn and Robey streets.
One northeast corner Vanhorn street and Hoyne avenue.
One northwest corner Van Buren street and Hermitage avenue.
One northwest corner Wabansia avenue and Wood street.
One northwest corner Wabansia avenue and Commercial street.
One northwest corner Wabansia avenue and Dickson street.
One southwest corner Wood street and Milwaukee avenue.
One southwest corner Wood and Thomas streets.
One southwest corner Wood and Jane streets.
One southwest corner Wood and Division streets.
One southwest corner Waller and Twelfth streets.
One northeast corner Wilcox street and Campbell avenue.
One northwest corner Winchester avenue and Van Buren street.
One northwest corner Wright and Union Streets.
One east side Wright street at end of pipe north of Redfield st.
Total in West Division, 243.

NORTH DIVISION.

One northwest corner "A" and Dominick streets.
One west side Bremer street 280 feet north of Chicago avenue.
One west side Bremer street 561 feet north of Chicago avenue.
One west side Bremer street in line of White street produced.
One west side Bremer street 180 feet south of Oak street.
One northwest corner Blackhawk and Halsted streets.
One northwest corner of Chicago avenue and Wesson streets.
One northeast corner Chicago avenue and Larrabee street.
One northwest corner Centre and Halsted streets.
One northwest corner Centre and Fremont streets.
One northwest corner Centre and Bissell streets.
One northwest corner Centre street and Sheffield avenue.
One northwest corner Centre and Fabius streets.
One north side Centre st. between Racine ave. and Fabius st.
One northwest corner Centre street and Racine avenue.
One northwest corner Cooper street and Clybourn avenue.

One southwest corner Cooper street and Fullerton avenue.
One west side Cooper st. between Clybourn and Fullerton aves.
One southwest corner Clybourn avenue and Clybourn place.
One northwest corner Clybourn avenue and Ward street.
One northeast corner Clybourn place and Hawthorne avenue.
One north side Clybourn pl. between Southport and Hawthorne aves.
One northeast corner Clybourn place and Southport avenue.
One north side Gardiner street, 350 feet east of Halsted street.
One north side Gardiner street, 700 feet east of Halsted street.
One northeast corner Goethe and Shaughnessy streets.
One north side Goethe street between Wells and Shaughnessy.
One southwest corner Hurlbut and Sigel streets.
One northwest corner Hickory and Haines streets.
One northwest corner Hickory and Bliss streets.
One southwest corner Hickory and Division streets.
One southeast corner Kroeger and Clyde streets.
One northwest corner Osgood and Center streets.
One northwest corner Oak and Bremer streets.
One northwest corner Perry street and Clybourn avenue.
One northwest corner Perry street and Belden avenue.
One southwest corner Perry street and Fullerton avenue.
One northeast corner Pearson and Franklin streets.
One northwest corner Racine avenue and Kroeger streets.
One northwest corner Sophia and Dayton streets.
One southwest corner Southport avenue and A street.
One northwest corner Southport avenue and B street.
One northwest corner Southport avenue and C street.
One northwest corner Southport and Clybourn avenues.
One on Southport avenue at No. 3 engine house.
One northwest corner North Water and Pine streets.
One northwest corner Webster avenue and Dayton street.
One northwest corner Webster avenue and Fremont street.
One northwest corner Webster and Clybourn avenues.
One northeast corner Webster and Herndon avenues.
One northeast corner Webster avenue and Lewis street.
One northeast corner Webster and Racine avenues.
One northeast corner Webster avenue and Fabius street.
One northwest corner White and Franklin streets.
One southwest corner Ward street and Belden avenue.

Total in North Division, 55.

In all 455, making, together with those previously put in, 2,254 hydrants in the city at this date. 182 were renewed during the year, and 84 received more or less repairs.

The work of putting in more and larger hydrants, in connection with the laying of large mains and other improvements, was carried to an unusual extent during the year. The most valuable portion of the city, that in the south division north of Harrison street, is now much better provided for than ever before. Something, however, remains to be done even here. Other portions of the city, considered the most exposed to danger in case of fire, have received considerable attention, as will be seen by glancing at the list of new hydrants established. This list does not show, however, the cases in which ordinary single hydrants have been replaced by large double ones.

The usual precautions to prevent hydrants from freezing were taken last winter, but notwithstanding this and the extraordinary mildness of the season, a great many cases of freezing occurred. The principal causes of this are the open areas in the central portions of the city, and the ditches on the sides of the streets in the outer portions. Careful observations during the last two winters have brought to light some curious facts. One is, that hydrants which were not frozen once during the severe weather of two winters ago, were frozen some times last winter. Other hydrants connected with the sewers by drain pipes, through which in former years the warm air of the sewers came up and kept the hydrants from freezing, were frequently found frozen. This was prevented by stopping the current of air through the drain pipe, thus showing that, in some instances, at least, the strong upward currents of warm air from the sewers known to exist formerly have become reversed.

As mentioned in the last annual report, page eighty-one, the most effective way of preventing the hydrants from freezing seems to be by putting them right over the street mains and under the surface of the roadway. This system appears to be getting more

popular in some of the eastern cities, but has been considered objectionable here on account of the many unimproved streets we have, and the custom of removing neither snow, nor ice, nor anything else, from the paved streets during several of the coldest months. The Fire Department now begin to desire some of these hydrants, besides the ordinary ones, in the most improved portions of the city, and express a willingness to keep them clear of snow and ice themselves.

STOPCOCKS.

The following Stopcocks were put in during the year, viz :

SOUTH DIVISION.

- One 4 inch, Arnold street, south line Thirty-fifth street.
- One 4 inch, Arnold street, north line Thirty-seventh street.
- One 16 inch, Adams street, west line Wabash avenue.
- One 16 inch, Adams street, east line La Salle street.
- One 16 inch, Adams street, in feeder at La Salle street.
- Three 12 inch, Adams street, in connections at La Salle street.
- One 8 inch, Adams street, in blow-off at La Salle street.
- One 4 inch, Alexander street, west line Portland avenue.
- One 4 inch, Butterfield street, north line Thirty-ninth street.
- One 4 inch, Butterfield street, south line Thirty-fifth street.
- One 4 inch, Butterfield street, north line Thirty-seventh street.
- One 4 inch, Bonfield street, north line Archer avenue.
- One 4 inch, Bushnell street, west line Portland avenue.
- One 6 inch, Calumet avenue, south line Thirty-first street.
- One 6 inch, Dashiell street, south line Twenty-sixth street.
- One 4 inch, Dearborn street, north line Thirty-fifth street.
- One 6 inch, Dearborn street, south line Thirty-fifth street.
- One 6 inch, Dearborn street, north line Thirty-seventh street.
- One 6 inch, Dearborn street, north line Thirty-ninth street.
- One 4 inch, Emerald avenue, north line Thirty-seventh street.
- One 4 inch, Emerald avenue, south line Thirty-first street.

One 4 inch, Ellis avenue, north line Thirty-seventh street.
One 4 inch, Ellis avenue, north line Thirty-ninth street.
One 4 inch, Finnell street, west line Portland avenue.
One 6 inch, Garibaldi street, south line Twenty-sixth street.
One 12 inch, Harrison street, east line State street.
One 12 inch, Hanover street, south line Twenty-sixth street.
One 6 inch, Halsted street, south line Archer avenue.
One 6 inch, Indiana avenue, south line Thirty-third street.
One 6 inch, Joseph street, north line archer avenue.
One 6 inch, Jackson street, east line State street.
One 4 inch, Kossuth street, west line Wallace street.
One 4 inch, Kossuth street, west line Portland avenue.
One 36 inch, La Salle street, south line Adams street.
One 4 inch, Lake avenue, north line Thirty-seventh street.
One 6 inch, Murray street, south line Twenty-sixth street.
One six inch, Murray street, south line Archer avenue.
One 8 inch, Market street, north line Adams street.
One 8 inch, Market street, south line Adams street.
One 4 inch, McGregor street, west line Wallace street.
One 6 inch, Portland avenue, south line Twenty-ninth street.
One 6 inch, Portland avenue, south line Thirty-first street.
One 12 inch, Portland avenue, south line Twenty-fourth street.
One 6 inch, Quarry street, north line Archer avenue.
Two 8 inch, Rush street, in water pipe tunnel. (Blow off.)
One 6 inch, South Water street, east line Clark street.
One 6 inch, State street, in feeder at Madison street.
One 6 inch, Summer street, south line Twenty-sixth street.
One 6 inch, Twenty-second street, east line of Clark street.
One 6 inch, Twenty-third street, west line Portland avenue.
One 12 inch, Twenty-third street, east line Clark street.
One 12 inch, Twenty-third street, east line State street.
One 12 inch, Twenty-fifth street, west line Portland avenue.
One 4 inch, Twenty-fifth street, west line Wallace street.
One 12 inch, Twenty-fifth street, west line Stewart avenue.
One 8 inch, Twenty-sixth street, west line Wallace street.
One 4 inch, Twenty-seventh street, west line Portland avenue.
One 6 inch, Twenty-eighth street, west line Hanover street.
One 6 inch, Thirtieth street, west line Portland avenue.
One 6 inch, Thirty-fourth street, west line Halsted street.
One 8 inch Thirty-seventh street, west line Stewart avenue.

One 8 inch, Thirty-seventh street, east line Clark street.
One 6 inch, Vincennes avenue, north line Thirty-seventh street.
One 6 inch, Wabash avenue, south line Thirty-third street.
One 8 inch, Wabash avenue, south line Van Buren street.
One 6 inch, Wabash ave., south line Van Buren st., (blow off.)
One 6 inch, Wallace street, south line Twenty-sixth street.
One 6 inch, Washington street, east line State street.
Two 8 inch, Washington street, in feeders at La Salle street.
One 8 inch, Washington street, in blow off at La Salle street.
Total in south division, 74.

WEST DIVISION.

One 4 inch, Ashley street, west line Lincoln street.
One 6 inch, Armour street, north line West Ohio street.
One 4 inch, Ambrose street, west line Wood street.
One 4 inch, Allport street, south line Sixteenth street.
One 8 inch, Ada street, north line Fulton street.
One 8 inch, Ashland avenue, south line Twelfth street.
One 8 inch, Ashland avenue, south line West Fourteenth street.
One 6 inch, Bauwans street, west line Ashland avenue.
One 6 inch, Bickerdike street, north line West Ohio street.
One 8 inch, Blue Island avenue, west line Western avenue.
One 6 inch, Cleaver street, north line Division street.
One 4 inch, Cork street, west line Ashland avenue.
One 6 inch, Courtland avenue, west line Leavitt street.
One 6 inch, Coulter street, west line Western avenue.
One 8 inch, California avenue, north line Fulton street.
One 4 inch, Carroll avenue, west line Robey street.
One 6 inch, West Congress street, west line Peoria street.
One 4 inch, West Congress street, west line Robey street.
One 6 inch, West Congress street, west line Western avenue.
One 6 inch, Dickson street, north line North avenue.
One 4 inch, Dickson street, north line Wabansia avenue.
One 4 inch, Dean street, south line Brigham street.
One 8 inch, Division street, west line Milwaukee avenue.
One 6 inch, Evergreen street, south line Milwaukee avenue.
One 6 inch, Elk Grove street, south line North avenue.
One 6 inch, Elk Grove street, north line North avenue.
One 6 inch, West Eighteenth street, west line Loomis street.
One 6 inch, West Eighteenth street, west line Morgan street.

One 6 inch, West Eighteenth street, west line Robey street.
One 4 inch, Eighteenth place, west line Morgan street.
One 6 inch, Ellen street south line Milwaukee avenue.
One 6 inch, Fontenoy place, south line Milwaukee avenue.
One 6 inch, West Fifteenth street, west line Ashland avenue.
One 4 inch, West Fifteenth street, in feeder at Throop street.
One 6 inch, Flourney street, west line Robey street.
One 12 inch, Fulton street, west line Rockwell street.
One 4 inch, Fulton street, west line Robey street.
One 4 inch, Fulton street, west line Wood street.
One 4 inch, Fairfield street, north line Fulton street.
One 6 inch, West Fourteenth street, west line Ashland avenue.
One 8 inch, West Fourteenth street, west line Stewart avenue.
One 6 inch, West Fourteenth street, west line Wood street.
One 8 inch, West Fourteenth street, west line Jefferson street.
One 8 inch, West Fourteenth street, west line Halsted street.
One 8 inch, West Fourteenth street, west line Morgan street.
One 8 inch, West Fourteenth street, in feeder at Newbury avenue.
One 6 inch, Girard street, north line Milwaukee avenue.
One 6 inch, Girard street, south line North avenue.
One 6 inch, Girard street, north line North avenue.
One 8 inch, Holden street, south side Twelfth street.
One 4 inch, West Huron street, west line Robey street.
One 8 inch, Harbine street, west line Wood street.
One 8 inch, Harbine street, west line Robey street.
One 4 inch, Howard street, west line Robey street.
One 8 inch, Harrison street, west line Western avenue.
One 8 inch, Harrison street, west line Leavitt street.
One 4 inch, Hinman street, west line Robey street.
One 6 inch, Hastings street, west line Ashland avenue.
One 6 inch, Henry street, west line Ashland avenue.
One 6 inch, Henry street, in feeder at Throop street.
One 6 inch, Houston street, south line Milwaukee avenue.
One 6 inch, Hubbard street, west line Western avenue.
One 6 inch, Hamilton avenue, north line Division street.
One 6 inch, Jane street, west line Wood street.
One 8 inch, Jackson street, west line Peoria street.
One 6 inch, Lincoln street, south line Milwaukee avenue.
One 6 inch, Leavitt street, north line Fulton street.
One 6 inch, Leavitt street, north line Milwaukee avenue.

- One 8 inch, Leavitt street, south line Van Buren street.
- One 6 inch, Laflin street, south line Polk street.
- One 6 inch, Lake street, west line Rockwell street.
- One 4 inch, Lake street, west line Sheldon street.
- One 6 inch, Lincoln street, north line Augusta street.
- One 6 inch, Milwaukee avenue, north line Wabansia avenue.
- One 6 inch, Milwaukee avenue, east line Western avenue.
- One 6 inch, Milwaukee avenue, west line Leavitt street.
- One 8 inch, Morgan street, south line West Nineteenth street.
- One 4 inch, Mark street, south line Chicago avenue.
- One 6 inch, Moore street, west line Wood street.
- One 6 inch, Monroe street, west line Western avenue.
- One 6 inch, Monroe street, west line Leavitt street.
- One 8 inch, Madison street, west line Rockwell street.
- One 8 inch, North avenue, west line Milwaukee avenue.
- One 8 inch, North avenue, west line Hoyne avenue.
- One 8 inch, North avenue, west line Leavitt street.
- One 8 inch, North avenue, west line Western avenue.
- One 4 inch, Nutt court, south line Nineteenth street.
- One 8 inch, West Ohio street, west line Noble street.
- One 4 inch, Owasco street, west line Western avenue.
- One 6 inch, Oakley street, north line Kinzie street.
- One 6 inch, Ogden avenue, west line Wood street.
- One 6 inch, Ogden avenue, south line Van Buren street.
- One 6 inch, Ogden avenue, south line Harrison street.
- One 6 inch, Ogden avenue, west line Robey street.
- One 6 inch, Ogden avenue, south line Polk street.
- One 6 inch, Ogden avenue, west line Leavitt street.
- One 6 inch, Paulina street, south line West Fourteenth street.
- One 8 inch, Robey street, north line Wabansia avenue.
- One 8 inch, Robey street, south line Milwaukee avenue.
- One 6 inch, Robey street, south line Harbine street.
- One 4 inch, Rebecca street, west line Ashland avenue.
- One 6 inch, Rebecca street, west line Loomis street.
- One 6 inch, Rebecca street, in feeder at Throop street.
- One 4 inch, Rice street, west line Wood street.
- One 4 inch, Stein street, north line Redfield street.
- One 6 inch, Seymour street, north line Fulton street.
- One 6 inch, Stewart avenue, north line West Fourteenth street.
- One 4 inch, St. Johns place, north line Fulton street.

One 6 inch, Thomas street, west line Wood street.
One 12 inch, Throop street, south line Twelfth street.
One 6 inch, Throop street, in feeder at Blue Island avenue.
One 6 inch, Throop street, in feeder at Thirteenth place.
One 6 inch, Throop street, in feeder at Sixteenth street.
One 12 inch, Throop street, south line of Sixteenth street.
One 6 inch, Throop street, in feeder at Thirteenth street.
One 6 inch, Throop street, in feeder at Hastings street.
One 12 inch, Throop street, south line West Fourteenth street.
One 6 inch, Throop street, in feeder at West Fourteenth street.
One 4 inch, Thirteenth place, west line Ashland avenue.
One 4 inch, West Twentieth street, west line Robey street.
One 6 inch, West Twenty-first street, west line Leavitt street.
One 6 inch, Twenty-second street, west line Ashland avenue.
One 8 inch, Twenty-second street, west line Wood street.
One 8 inch, Twenty-second street, west line Leavitt Street.
One six inch, Upton street, south line Milwaukee avenue.
One six inch, Upton street, north line Milwaukee avenue.
One 4 inch, Union park place, north line Fulton street.
One 4 inch, Vanhorn street, west line Robey street.
One 6 inch Van Buren Street, west line Wood street.
One 6 inch Wabansia avenue, west line Wood street.
One 8 inch, Wood street, south line Milwaukee avenue.
One 8 inch, Wood street, north line Milwaukee avenue.
One 8 inch, Wood street, south line Division street.
One 6 inch, Wilcox avenue, west line Western avenue.
One 8 inch, Winchester avenue, south line Van Buren street.
One 4 inch Warren avenue, west side Leavitt street.
One 4 inch, Warren avenue, west line Rockwell street.
One 6 inch, Washtenaw avenue, north line Fulton street.
One 4 inch, Walnut street, west line Robey street.
One 4 inch, Walnut street, west line Wood street.
One 4 inch, Washington avenue, west line Wood street.
Total in West Division, 141.

NORTH DIVISION.

One 4 inch, A street, west line Southport avenue.
One 4 inch, B street, west line Southport avenue.
One 6 inch, Bissel street, south line Center street.
One 8 inch, Bremer street, north line Oak street.

One 8 inch, Bremer street, south line White street.
One 4 inch, Church street, south line Blackhawk street.
One 4 inch, C street, west line Southport avenue.
One 16 inch, Centre street, west line Sheffield avenue.
One 4 inch, Clybourn avenue, west line Southport avenue.
One 6 inch, Clybourn avenue, west line Racine avenue.
One 6 inch, Clybourn avenue, south line Clybourn place.
One 4 inch, Cooper street, north Clybourn avenue.
One 16 inch, Centre street, west line Halsted street.
One 4 inch, Dayton street, north line Centre street.
One 4 inch, Dayton street, south line Centre street.
One 4 inch, Dayton street, north line Webster avenue.
One 6 inch, Fremont street, north line Centre street.
One 6 inch, Fremont street, south line Centre street.
One 6 inch, Fabius street, north line Centre street.
One 6 inch, Fabius street, north line Webster avenue.
One 6 inch, High street, south line Fullerton avenue.
One 6 inch, Hurlburt street, south line Blackhawk street.
One 6 inch, Hurlbut street, north line Webster avenue.
One 6 inch, Herndon street, north line Webster avenue.
One 6 inch, Hawthorne avenue, north line Clybourn place.
One 4 inch, Kingsbury street, south line Chicago avenue.
One 6 inch, Kroeger street, east line Racine avenue.
One 6 inch, Lewis street, north line Webster avenue.
One 4 inch, Lawrence street, west line Southport avenue.
One 4 inch, Mohawk street, south line Blackhawk street.
One 6 inch, Osgood street, north line Centre street.
One 6 inch, Perry street, north line Clybourn avenue.
One 6 inch, Perry street, south line Fullerton avenue.
One 24 inch, Rush street, at Water pipe tunnel.
One 8 inch, Racine avenue, north line Centre street.
One 16 inch, Racine avenue, north line Clybourn avenue.
One 8 inch, Racine avenue, north line Webster avenue.
One 6 inch, Sheffield avenue, south line Centre street.
One 8 inch, Sheffield avenue, north line Centre street.
One 4 inch, Ward street, north line Webster avenue.
One 8 inch, Webster avenue, west line Clybourn avenue.
One 12 inch, North Water street, west line Pine street.

Total in North Division, 42.

In all 257, which together with those previously in, would make 1,794 stopcocks in the city at this date. One had to be repaired during the year and one renewed.

NEW LAKE TUNNEL.

This work has proceeded with great regularity and satisfaction from the land end. On the first of April, the point reached was 6,777 feet from the land shaft.

At the crib end much delay and difficulty was experienced in consequence of water passing through from the old tunnel to the new work, making it apparently very unsafe to proceed without the pneumatic process which was required in the contract in case such a contingency should arise. Unfortunately this process, while it preserved the old work from apprehended danger created a new and unexpected difficulty by the escape of air from the bottom of the new cylinder and up along the outside to the surface of the lake. The cylinder, however, was sunk to its full depth and the shaft satisfactorily completed, and a commencement made to push southerly from the cylinder to the line of the new tunnel. The water and earth came in so rapidly from above, through the opening made by the escape of air, as to render further progress impossible by the ordinary methods of tunneling without endangering the stability both of the old tunnel and the crib. A diver was employed and great pains taken to effectually close up the opening on the outside of the cylinder. When success in this direction seemed to have been attained, an unsafe quantity of water was found to be passing through from the old tunnel. Efforts were made by the diver to stop this leakage from the inside of the old tunnel without shutting off the supply through it to the city; but without success. To avoid further risk to the old work, and to stop the leak from it with the greatest certainty and least further expense, it was determined

to pump out the water from the old tunnel, and supply the city for a time, from the shore or inlet basin. This operation, always objectionable in itself because of the inferiority of the shore water, was peculiarly so last summer, on account of the presence of Asiatic cholera in the city; and was therefore postponed as long as possible, in fact till after any cholera cases ceased to be reported to the Board of Health. After the water was pumped out of the old tunnel, to a sufficient depth, the masonry at that end was found to be as perfect as the day on which it was completed. The leakage was traced to an original defect around the bulkhead placed in the short drift eastward from the shaft, to aid in any further extension of the tunnel that might be determined upon. This defect was easily remedied by closing up the drift with solid masonry, and the further precaution was taken to thoroughly cleanse the lower part of the shaft and about thirty feet of the tunnel westward and cover them with a thin coat of Portland cement. The water, after having been off seventeen days, was again let on, and there has been no sign of leakage between the old work and the new since.

After waiting from week to week for the filling on the outside of the new cylinder to become compact, which was aided, as far as could be done safely, by drawing the water from it through small holes bored in the sides of the cylinder, it was still deemed too hazardous to attempt to prosecute the work in the ordinary way. After careful soundings through the small holes bored in the sides of the cylinder, the clay which was known to be very firm originally all around was found to be very soft for about three feet out on the southeast side, from the bottom of the cylinder to the bottom of the lake, the effect no doubt of the escape of compressed air on that side.

It was determined at first to drive pieces of two inch bar iron above and around the side of the drift, through the cylinder and into the hard clay, and then to close the joints between them by another layer of thinner wrought iron. It was afterwards determined to put another floor of wrought iron a few feet above and in a horizontal position. This was composed first of fan-shaped pieces of two

inch bars with close joints, which were covered above with a layer of three-quarter inch bars. After this was done it was found that the influx of soft mud below the floors had been completely checked, and the work at that end has been carried on very satisfactorily ever since, reaching, April 1st, a point 1,100 feet from the crib, and 2,583 feet from that reached by the land party.

Much of general interest might be said in this connection, but the above is considered sufficient to show the nature of the difficulties encountered and how they were finally overcome. The contractors, though much discouraged for a time, and put to considerable extra expense in consequence of having to carry on their operations with reference to the safety of the old tunnel and the crib, carried out readily and skilfully the directions given them. They were very fortunate in the selection of their foreman, Mr. Wm. Innes, for that end of the work.

Should no unexpected difficulty be encountered it is probable that this tunnel will be completed in July.

LAKE TUNNEL CRIB.

Messrs. Steel, McMahon & Steel, the contractors for the new structure on the foundations of the old crib, commenced their operations last year, and carried up the outer walls to within three feet of their full height. The inner walls, the tower for the light-house, and other work were suspended until the completion of the new lake tunnel, or at least till tunneling operations at that end ceased. It is believed there will be ample time for the completion of the whole work before winter, because the most doubtful and difficult part of it, the laying of the foundations and the main body of the outer walls, is completed. The foundations of the inner walls will be not only less than one-half the outer ones in extent, but will be

protected by the latter from the troublesome action of waves, which render so uncertain all estimates with regard to time required to do work exposed to them.

LAND EXTENSION OF THE NEW LAKE TUNNEL.

This work which extends from the shore end of the new lake tunnel, in a nearly straight direction to the lot purchased for the new pumping works, at the southwest corner of Blue Island avenue and Twenty-second street, was commenced by the contractors, Messrs. Cox Bros., on Illinois street, the — of July last. On April 1st, besides the Illinois street, the Franklin street, the Polk street and the Waller street working shafts, the Erie street, the Kinzie street, the Market street and the Taylor street fire shafts had been sunk, and 10,356 feet of tunnel made, leaving about 10,324 feet to be made, which will probably be finished before winter.

That portion of the tunnel which is under the most valuable part of the city, and including the passages under the main river and the south branch, has been completed without causing any known settlement of the ground or buildings above. On each side of the Polk street shaft, however, unusually bad ground was met, which settled so much as to ruin one brick building valued at about \$5,000, and greatly to disturb several small wooden out-buildings, besides causing much annoyance to the occupants of some of the houses in the immediate vicinity. Southwardly from this shaft the work has been carried out successfully on the original line, but after spending months in trying to pass through some very

bad ground by timbering closely, and when success seemed to have been assured, a sudden irruption of sand and water from below drove out the men, and let down and otherwise so deranged the timbers as to make it unadvisable to attempt further operations on that line, at least until the nature of the ground in that vicinity could be more certainly ascertained.

It should be said here that the original borings which were generally about five hundred feet apart, did not indicate any such ground as was met here. The new borings have developed decidedly better ground to the east of the original, and accordingly the line has been moved, in this vicinity, about one hundred feet in that direction.

NEW PUMPING WORKS.

Nothing has been done thus far towards the construction of the new pumping works, at the end of the new lake tunnel extension, except the discussion of the kind of pumping engine to be adopted, it being understood that there are no funds yet to erect such works and lay the lines of large pipes necessary to make them available. The total sum required for them is about \$500,000. It is greatly to be desired that the Board should be authorized soon to take such steps as they may deem most appropriate for making fully available the new lake tunnel and its extension under the city.

SEWERAGE.

CHICAGO, April 1st, 1874.

To E. S. CHESBROUGH, Esq.,

City Engineer.

SIR:—I present herewith a report for the year ending with this date, of the sewers built during that period, with the necessary catch basins and manholes, together with tabular statements of the repairs and cleansing of the sewers, of the work done for raising the same to the grade of streets being paved, and of the private connections which have been made with the sewers.

Respectfully submitted,

WM. H. CLARKE,

Principal Assistant Engineer.

LENGTH IN FEET OF SEWERS BUILT TO APRIL 1, 1874.

Diameter in feet.	SOUTH DIV.		WEST DIV.		NORTH DIV.		TOTAL THREE DIVISIONS.			
	Previous to April 1, 1873.	From April 1, 1873, to April 1, 1874.	Previous to April 1, 1873.	From April 1, 1873, to April 1, 1874.	Previous to April 1, 1873.	From April 1, 1873, to April 1, 1874.	Totals pre- vious to April 1, 1874.	Totals Apr. 1, 1873, to Apr. 1, 1874	Total sewers built up to April 1, 1874.	Av. cost per foot, with catch basins 1873-4.
6	2,408	.....	1,292	.....	3,895	.....	7,595	.....	7,595	.....
5	6,036	675	39,411	1,730	13,756	.....	59,203	2,405	61,608	6.83
4½	2,349	.....	40,788	2,713	9,615	.....	52,752	2,713	55,465	6.76
4	5,400	1,359	40,451	5,373	8,526	404	54,377	7,136	61,513	6.10
3½	912	1,326	10,876	1,322	.....	938	11,788	3,586	15,374	5.82
3	25,452	3,995	15,071	5,630	9,169	.....	49,692	9,625	59,317	4.66
2½	56,482	3,767	6,630	2,173	18,094	4,952	81,206	10,892	92,098	4.10
2	6,359	.....	.....	.....	.....	.....	6,359	.....	6,359	.....
1½	71,872	9,448	137,178	24,531	83,240	7,630	292,290	41,609	333,899	2.89
1	.....	1,172	78	282	857	563	935	2,017	2,952	2.80
	107,772	27,762	99,147	24,813	75,104	14,144	282,023	66,719	348,742	1.80
	285,042	49,504	390,922	68,567	222,256	28,831	898,220	146,702	1,044,922	General Average per foot.
	334,546	.....	459,489	.....	250,887	.....	.....	274,113	197,413	\$2.95
	32 per cent.	.....	44 per cent.	.....	24 per cent.	.....	.....	miles.	miles.	Per mile. \$15,576

The total amount expended for construction of sewers for the past year, including catch basins, &c., and for refunding advances made by property owners for building sewers in previous years, was \$450,322.90, distributed as follows: South Division, \$136,053.41. West Division, \$210,155.76. North Division, \$104,113.73.

The entire expenditures for sewerage from the commencement of the work in 1855, is as follows:

South Division.....	\$1,111,209.88
West Division.....	1,719,821.86
North Division.....	818,231.27
Total.....	\$3,649,262.01

SOUTH DIVISION.

LOCATION.			Length in feet of Sewers Built.							
ON WHAT STREET.	FROM	TO	5	4	3½	3	2½	2	1½	1
Halsted st.....	Archer ave.....	Twenty-sixth st.....	675							
Twenty-sixth st.....	Halsted st.....	Wallace st.....		1359						
Twenty-sixth st.....	Wallace st.....	Stewart ave.....			1326					
Twenty-sixth st.....	Stewart ave.....	Wentworth ave.....				1326				
McGregor st.....	Stewart ave.....	Wentworth ave.....				1312				
State st.....	Thirty-fifth st.....	Thirty-third st.....				1367				
Wentworth ave.....	Twenty-fourth st.....	Twenty-fifth st.....					725			
Wentworth ave.....	Twenty-sixth st.....	Twenty-seventh st.....					659			
State st.....	Thirty-third st.....	Thirty-first st.....					1331			
Vincennes ave.....	207 ft. S. of Douglas pl	Wapansah ave.....					1162			
Stewart ave.....	Bushnell st.....	Alexander st.....					563			
Stewart ave.....	McGregor st.....	Twenty-fourth st.....					363			
Buddan st.....	McGregor st.....	Twenty-fourth st.....					360			
Wentworth ave.....	Twenty-third st.....	Bushnell st.....					371			
Wentworth ave.....	Twenty-seventh st.....	Twenty-ninth st.....					802			
Wentworth ave.....	Twenty-sixth st.....	Kosuth st.....					366			
Buddan st.....	Twenty-third st.....	Bushnell st.....					363			
Twenty-sixth st.....	State st.....	Butterfield st.....					631			
Thirty-first st.....	State st.....	Butterfield st.....					648			
Thirty-second st.....	State st.....	Butterfield st.....					651			
Thirty-third st.....	State st.....	Butterfield st.....					647			
Thirty-first st.....	Prairie ave.....	Calumet ave.....					742			
Lake ave.....	Thirty-fifth st.....	274 ft S. Wapansah av.					1336			
Wapansah ave.....	Vincennes ave.....	Langley ave.....					430			
Langley ave.....	Wapansah ave.....	Egan ave.....					1176			
Lake ave.....	274 S. Wapansah ave..	Egan ave.....						1172		
Twenty-fifth st.....	Indiana ave.....	Alley W. of Mich'n av.								492
Twentieth st.....	Purple st.....	Arnold st.....								852
Elgin st.....	Purple st.....	261 W. of Stewart ave.								1024
Butterfield st.....	Twenty-seventh st.....	Thirtieth st.....								1740
Burnside st.....	Twenty-ninth st.....	Thirtieth st.....								876
Bryant ave.....	Vincennes ave.....	westward.....								680
Myrick ave.....	Twenty-ninth st.....	northward.....								179
Arnold st.....	Twenty-second st.....	Twenty-first st.....								426
Twentieth st.....	Twentieth st.....	Sixteenth st.....								1568
Twentieth st.....	Purple st.....	westward.....								334
Finnell st.....	Buddan st.....	Wentworth ave.....								766
Alexander st.....	Stewart ave.....	Wentworth ave.....								1312
Bushnell st.....	Archer ave.....	Wentworth ave.....								2246
Twenty-fourth st.....	Hanover st.....	Wentworth ave.....								1770
Twenty-fourth st.....	Hanover st.....	westward.....								230
Wentworth ave.....	Twenty-fifth st.....	Kosuth st.....								266
Wentworth ave.....	Twenty-fourth st.....	Bushnell st.....								268
Wentworth ave.....	Finnell st.....	Alexander st.....								212
McGlashen st.....	Twenty-second st.....	Archer ave.....								435
Farrel st.....	Archer ave.....	northward.....								412
Bonfield st.....	Archer ave.....	northward.....								420
Butterfield st.....	Sixteenth st.....	Twenty-second st.....								2284
Burnside st.....	Twenty-fifth st.....	Twenty-sixth st.....								666
Butterfield st.....	Twenty-fifth st.....	Twenty-sixth st.....								664
Seventeenth st.....	State st.....	Burnside st.....								367
Nineteenth st.....	State st.....	Burnside st.....								334
Twentieth st.....	State st.....	Burnside st.....								374
Twenty-first st.....	State st.....	Burnside st.....								374
Thirty-first st.....	{ Indiana ave.....	Prairie ave..... }								578
Twenty-ninth st.....	{ Calumet ave.....	South Park ave..... }								
	Prairie ave.....	South Park ave.....								752
Amounts carried forward.....			675	1359	1326	3906	3767	9448	1172	22901

THE BOARD OF PUBLIC WORKS.

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SOUTH DIVISION.—CONTINUED.

LOCATION.			Length in Feet of Sewers built.							
ON WHAT STREET.	FROM	TO	5	4	3½	3	2½	2	1½	1
	Amounts	brought forward.....	675	1359	1326	3995	3767	9448	1172	22901
Twenty-ninth st.....	Indiana ave.....	Prairie ave.....								377
Prairie ave.....	Thirtieth st.....	Thirty-first st.....								420
Burnside st.....	Thirtieth st.....	Thirty-third st.....								1776
Lake ave.....	Egan ave.....	Oakwood ave.....								319
State st.....	Madison st.....	Jackson street.....								1385
Outlet 22d st.....										
Outlet 12th st.....										
WING SEWERS.										
Thirtieth st.....	Sewer in Wabash ave.	6 ft w. w. line Wab. av.								39
Thirtieth st.....	Sewer in Wabash ave.	7 ft. e. e. line Wab. av.								40
Thirty-second st.....	Sewer in Wabash ave.	5 ft. w. w. line Wab. av.								50
Thirty-second st.....	Sewer in Wabash ave.	2 ft. e. e. line Wab. av.								57
Thirty-third st.....	Sewer in Wabash ave.	5 ft. w. w. line Wab. av.								50
Thirty-third st.....	Sewer in Wabash ave.	2 ft. e. e. line Wab. av.								57
Thirty-fourth st.....	Sewer in Wabash ave.	6 ft. e. e. line Wab. av.								61
Thirty-fourth st.....	Sewer in Wabash ave.	2 ft. w. w. line Wab. av.								50
Prairie ave.....	Sewer in 31st st.....	southward.....								42
Calumet ave.....	Sewer in 31st st.....	northward.....								42
Calumet ave.....	Sewer in 31st st.....	southward.....								42
Myrick ave.....	Sewer in 29th st.....	7 ft. n. of n. line 29th st.								40
Thirty-first st.....	Sewer in State st.....	eastward.....								14
Totals.....			675	1359	1326	3995	3767	9448	1172	27762
			Total, 49,504 feet.							

WEST DIVISION.

LOCATION.			Length in Feet of Sewers Built.								
ON WHAT STREET.	FROM	TO	5	4½	4	3½	3	2½	2	1½	1
Augusta st.....	Milwaukee ave.....	Ashland ave.....	1730								
Kinzie st.....	Morgan st.....	Noble st.....	2713								
Maxwell st.....	Halsted st.....	Waller st.....	1363								
Indiana st.....	Lincoln st.....	Robey st.....	666								
Indiana st.....	Wood st.....	Lincoln st.....	670								
Van Buren st.....	Ashland ave.....	Robey st.....	2674								
Van Buren st.....	Robey st.....	Hayne st.....	656								
Indiana st.....	Robey st.....	Hayne st.....	666								
Wright st.....	Halsted st.....	Morgan st.....	1107								
16th st.....	Newberry st.....	Morgan st.....	843								
Centre ave.....	Polk st.....	McAllister st.....	197								
McAllister st.....	Centre ave.....	Sibley st.....	1000								
Washington st.....	Leavitt st.....	Western ave.....	1341								
Fulton st.....	200 ft. w. of Leavitt.	Western ave.....	1142								
Morgan st.....	Maxwell st.....	Mitchell st.....					435				
Centre ave.....	Mitchell st.....	Sampson st.....					663				
Maxwell st.....	Blue Island ave.....	Waller st.....					864				
Loomis st.....	Sampson st.....	southward.....					211				
Jefferson st.....	16th st.....	Eighteenth st.....						861			
Union st.....	Canalport ave.....	Sixteenth st.....						1500			
Luke st.....	Halsted st.....	John st.....						419			
Centre ave.....	Sampson st.....	Twelfth st.....						595			
Waller st.....	Maxwell st.....	Margaret st.....						847			
Catherine st.....	Centre ave.....	Frank st.....						694			
Waller st.....	Maxwell st.....	Rebecca st.....						191			
Morgan st.....	Wright st.....	Cornelia st.....						591			
Noble st.....	Augusta st.....	Cornelia st.....						356			
Holt st.....	Augusta st.....	Cornelia st.....						356			
Holt st.....	Chicago ave.....	Cornell st.....						627			
Chase st.....	Chicago ave.....	Cornell st.....						626			
Ashland ave.....	Chicago ave.....	Second st.....						698			
Morgan st.....	Van Buren st.....	Harrison st.....						743			
Morgan st.....	Gurley st.....	Harrison st.....						463			
Morgan st.....	12th st.....	Taylor st.....						729			
May st.....	12th st.....	Harrison st.....						2543			
Amounts carried forward.....			1730	2713	5373	1322	5630	2173	12899	282	

NORTH DIVISION.

LOCATION.			Length in ft. of Sewers Built.					
ON WHAT STREET.	FROM	TO	4	3½	2½	2	1½	1
Lincoln ave.....	35 ft. N.W. of Larrabee st	southeast.....	404					
Lincoln ave.....	Webster ave.....	Belden ave.....		938				
Hurlbut st.....	North ave.....	Menomonee st.....			1315			
Hurlbut st.....	Sophia st.....	Grant pl.....			978			
Franklin st.....	Across R. R. track.....	at Centre st.....			23			
Sophia st.....	Hurlbut st.....	Larrabee st.....			705			
Sheffield ave.....	North ave.....	Willow st.....			1036			
Webster ave.....	Lincoln ave.....	Orchard st.....			636			
Blackhawk st.....	Hurlbut st.....	Church st.....						
Halsted st.....	Rees st.....	Clybourn ave.....			1199			
Elm st.....	Sedgwick st.....	Franklin st.....			655			
Crosby st.....	Larrabee st.....	Elm st.....			1345			
Hurlbut st.....	Grant place.....	Belden ave.....			323			
Larrabee st.....	Webster ave.....	236 S. of Fullerton ave.....			1008			
Larrabee st.....	236 S. of Fullerton ave.....	north.....			135			
Willow st.....	Larrabee st.....	Howe st.....			363			
Sophia st.....	Larrabee st.....	Orchard st.....			663			
Willow st.....	Sheffield ave.....	Bissel st.....			359			
Hinsdale st.....	Rush st.....	eastward.....			503			
White st.....	Rush st.....	eastward.....			582			
Sophia st.....	Orchard st.....	Burling st.....			325			
Belden ave.....	Hurlbut st.....	Belden pl.....			238			
Belden ave.....	Sewer on Hurlbut st.....	eastward.....						415
Howe st.....	Sewer on Sophia st.....	southward.....						409
Franklin st.....	Lincoln ave.....	southward.....						178
Blackhawk st.....	Clybourn ave.....	Halsted st.....						546
Twomey st.....	Sedgwick st.....	west and north.....						397
Orchard st.....	North ave.....	Clybourn ave.....						711
Labar st.....	Division st.....	Larrabee st.....						691
Town court.....	North ave.....	southward.....						268
Hinsche st.....	Clybourn ave.....	Blackhawk st.....						422
Alaska st.....	Larrabee st.....	North ave.....						683
Connor st.....	Sedgwick st.....	Hurlbut st.....						826
Sullivan st.....	Sedgwick st.....	westward.....						361
Church st.....	Blackhawk st.....	North ave.....						619
Welland st.....	Schiller st.....	North ave.....						1237
Halsted st.....	North ave.....	Clybourn ave.....						184
Church st.....	Blackhawk st.....	southward.....						632
Langdon st.....	Clybourn ave.....	southwest.....						272
Weed st.....	Clybourn ave.....	northeast.....						225
Franklin st.....	Siegel st.....	Schiller st.....						351
Hein place.....	Sedgwick st.....	westward.....						274
Hills st.....	Market st.....	Franklin st.....						321
Crosby st.....	Elm st.....	Division st.....						349
Vine st.....	North ave.....	Willow st.....						1021
Centre st.....	Sedgwick st.....	Franklin st.....						645
Centre st.....	Franklin st.....	Clark st.....						52
Sophia st.....	Burling st.....	westward.....						89
Orchard st.....	Webster ave.....	Belden ave.....						605
Belden ave.....	Belden place.....	Orchard st.....						1025
Hinsdale st.....	Pine st.....	westward.....						42
White st.....	Pine st.....	westward.....						66
Butterfield place.....	Center of Halsted st.....	eastward.....						157
WING SEWERS.								
Hurlbut st.....	Sewer in Lincoln ave.....	22 ft. n. n. line Sophia st.....			70			
Larrabee st.....	Sewer in Lincoln ave.....	16 ft. n. n. line Webster ave.....			62			
Belden ave.....	Sewer in Lincoln ave.....	20 ft. w. w. line Orchard st.....			59			
Webster ave.....	Sewer in Lincoln ave.....	25 ft. w. w. line Larrabee st.....			68			
Centre st.....	Sewer in Lincoln ave.....	17 ft. w. w. line Sedgwick st.....			71			
Orchard st.....	Sewer in Lincoln ave.....	23 ft. n. n. line Belden ave.....			62			
Sedgwick st.....	Sewer in Lincoln ave.....	23 ft. s. s. line Centre st.....						37
Hurlbut st.....	Sewer in Lincoln ave.....	22 ft. s. s. line Sophia st.....						40
Sophia st.....	Sewer in Lincoln ave.....	36 ft. c. c. line Hurlbut st.....						58
Webster ave.....	Sewer in Lincoln ave.....	20 ft. c. c. line Larrabee st.....						42
Orchard st.....	Sewer in Lincoln ave.....	24 ft. c. c. line Belden ave.....						50
Belden ave.....	Sewer in Lincoln ave.....	24 ft. c. c. line Orchard st.....						49
Larrabee st.....	Sewer in Lincoln ave.....	32 ft. s. s. line Webster ave.....						52
Blackhawk st.....	Sewer in Halsted st.....	9 ft. w. e. line Halsted st.....						24
Sedgwick court.....	Sewer in Elm st.....	4 ft. s. n. line Elm st.....						28
Totals			404	938	4952	7630	563	14144
			Total, 28,631 feet.					

THIRTEENTH ANNUAL REPORT OF
CATCH BASINS AND MAN-HOLES BUILT.

Built from April 1, 1873, to April 1, 1874.				Previously Built.	Total.	Average Cost each in 1873-4.
	S. Division.	W. Division.	N. Division.			
Catch Basins....	204	498	195	5,051	5,948	\$71.84
Man-holes.....	339	461	215	5,501	6,516	12.00

REPAIRS OF SEWERS, CATCH BASINS AND COVERS.

	Sewers Repaired.	Cost.	Catch Basins	Cost.	Covers	Cost.	Total Cost.
South Division.	{ 124 ft. of 2 foot, 12 ft. of 15 inch, 5 ft. of 2½ ft. mouth of 12th st. sewer, 2 man-holes..... }	\$401.15	74	\$1,978.92	752	\$965.31	\$3,345.38
West Division.	{ 107 ft. of 2 foot, 35 ft. of 1 foot, 300 ft. of wood, 6 man-holes..... }	515.15	34	622.96	863	902.95	2,041.06
North Division.	617 ft. of 2 foot, 14 ft. of 4 foot.....	1,060.46	6	135.39	538	749.61	1,945.46
Totals.....		\$1,976.76	114	\$2,737.27	2,153	\$2,617.87	\$7,331.90

CLEANSING OF SEWERS FOR 1873-4.

Methods of Cleansing.	South Division.		West Division.		North Division.		Totals.		
	Feet Cleansed.	Cost.	Feet Cleansed.	Cost.	Feet Cleansed.	Cost.	Feet Cleansed.	Cost.	Average per 100 Feet.
By Flushing.....	100,235	\$2,483.32	48,625	\$1,688.75	88,795	\$2,544.00	237,655	\$ 6,716.07	\$2.83
By Chain Machine.....	40,222	5,043.53	95,846	5,942.91	59,877	3,086.75	195,945	14,073.19	7.18
Total Sewers.....	140,457	7,526.85	144,471	7,631.66	148,672	5,630.75	433,600	20,789.26	4.77
Catch Basins Cleansed.....	No. of 1,004	3,104.08	No. of 1,178	5,073.63	No. of 761	2,262.30	No. of 2,943	10,440.01	3.55
Total and Costs.....		10,630.93		12,705.29		7,893.05		31,229.27	

With the extension of the sewers, the cost of cleansing them is of course increased, but not in proportion to the increased length, as wherever the streets are paved the amount of cleansing is diminished, and the cost of doing the work on those streets is also less, as the deposit is chiefly of such a character that it can be removed by flushing, which, as will be observed in the table above is the cheapest method. A new and capacious flushing wagon has been constructed under the direction of Mr. D. Knights, the operation of which is very satisfactory.

RESTORATION OF THE PLATS AND RECORDS.

A small appropriation was made in 1872 for the above purpose and it is expected that the work will be completed during the coming year.

STREET INTERSECTIONS.

There have been raised to grade upon streets which were being filled and paved, 920 man-holes and catch basins, at an expense of \$13,890.02.

PRIVATE DRAINS.

PERMITS ISSUED FROM APRIL 1st, 1873, TO APRIL 1st, 1874.

Division.	6 Inch.	9 Inch.	12 Inch.	Total, 1873-4.	Total Previously.	Total to April 1st, 1874.
South	1,517	111	7	1,635		
West	2,016	83	6	2,105		
North	923	27	1	951		
Total	4,456	221	14	4,691	27,676	32,367

[End of Sewerage Report.]

CONDITION OF THE RIVER.

The main river and south branch were generally in a satisfactory state throughout the year. An occasional southerly wind will suddenly depress the surface of the lake, and this necessarily causes a discharge of a portion of the north branch into the main river. Then, on the return of the surface of the lake to its usual or higher level, a portion of the offensive discharge from the north branch into the main river finds its way into the south branch. This, added to the constant discharges from the sewers into the south branch makes its appearance very unsightly at times, but it very seldom has, even in a slight degree, any of the offensiveness of smell it had before the deepening of the Illinois and Michigan Canal.

The Ogden and Wentworth ditch, since its completion, has changed the normal condition of the south branch, at times preventing wholly any lake water from entering the Illinois and Michigan Canal. Fortunately in the dryest seasons there is very little water flowing in the Desplaines, and consequently the Ogden and Wentworth ditch has little or no appreciable effect upon the south branch. It is greatly to be desired that some arrangement should be made with the owners of this ditch to erect a suitable dam with sluice gates in it near the Desplaines, and place it under the control of the city, at least so far as to prevent water from passing from the river into the ditch whenever it would be injurious or objectionable. Such an arrangement might be made advantageous to both parties. There are times, generally of short duration, when a moderate current from the Desplaines into the south branch is decidedly beneficial, because at such times there is naturally a current into the lake, and the stronger that current within certain limits the better. Again there are times when the natural current in the south branch is so strong as to deepen the channel more or less. March 12th, 1849, this current was so strong as to carry away shipping and bridges and flood a part of the city. To be able, at such times, to control the direction which a large part of the Desplaines water would take would be of great service, and might avert great disaster. Unfortunately any current in the canal sufficiently strong to produce or aid materially in producing a scouring effect in the south branch and main river, brings from the ditch into the upper part of the south branch a large amount of silt, which is deposited in the river, and into the mouth of the docks there, and has to be dredged out again at a heavy expense. The problem in all its bearings is intricate and difficult, but it is very clear that the city is now exposed to greater damage and disaster than it was before the opening of this ditch, and that to a considerable extent at least this damage might be prevented by moderately expensive works, if the parties interested could agree in relation to them.

THE FULLERTON AVENUE CONDUIT.

For the cleansing of the north branch, the plan of forcing a current through a twelve foot circular conduit placed below the level of low water, from the river to the lake on Fullerton avenue having been adopted, the work has been contracted for, between the river and the Lake Shore Drive, by Messrs. Geo. F. Norris & Co., who are to complete it by the first of July, 1875.

RIVER TUNNELS.

These are in about the same condition as at the date of the last annual report. The actual amount of leakage into the Washington street tunnel is known to be very much less than it was formerly, but the effect of frost on the wet bricks in winter is becoming more and more injurious. A comparatively inexpensive experiment to prevent this action is recommended to be tried first on one-half the river portion. It consists of furring out with prepared strips of wood and lathing, and then putting a thick coating of the material so commonly used for covering steam boilers, leaving confined air spaces between the coating and the brick work. Should this experiment succeed, the appearance of the tunnel will be greatly improved, and the estimated cost for the entire river portion is only \$12,000.

OUTER HARBOR.

To Col. Houston, U. S. Engineer in charge, the Board is again indebted for information concerning this improvement. The crib-work of the breakwater has been extended 1,100 feet further south,

leaving only 150 feet of the 4,000 feet originally planned to be put in.

A further appropriation of \$75,000 has been made by the general government, which Col. Houston advises should be expended in extending the crib-work 150 feet further south, and then in raising the last 2,000 feet of the breakwater to its proper height.

As mentioned last year, it is still proposed to omit the pier originally planned from the south end of the breakwater westward to the shore, and in its stead to extend the breakwater still further south; but for reasons then given this matter still remains unsettled.

The entrance to the harbor, near and west of the Ogden Slip, has been dredged and 5,850 cubic yards of material removed.

The north end of the breakwater was injured by the striking of a vessel against it, and has since been repaired, besides which, piles have been driven near it to prevent another occurrence of the kind.

DOCK LINE SURVEY.

In consequence of the loss of the plans and field notes of the former "Dock Line Survey" by the great fire of 1871, a new survey was ordered, and up to this date has been so far carried out as to embrace the whole of the south branch, including the many docks connected with it, and about one-half of the north branch. It is expected that all the field work will be completed the present season, and all the office work during the current municipal year.

Respectfully submitted,

E. S. CHESBROUGH,

City Engineer.

STREETS, BRIDGES AND PUBLIC BUILDINGS.

CHICAGO, April 20th, 1874.

To the Board of Public Works :

GENTLEMEN: — The thirteenth annual report of this department is respectfully presented for your consideration.

During the past year the following work was done under my supervision, viz :

Construction of two viaducts, two bridges, three engine houses, one engine house and police station combined under one roof, two police stations, small pox hospital, alterations to police stations on West Madison and West Lake streets. The walls and coping of the river tunnels where damaged by fire, have been repaired and replaced, new abutments and approaches and iron approach spans to Lake street bridge have been constructed. A wall and coping of rubbed stone placed around Washington square and asphaltic concrete walks laid around the same. The walks and drives at the grounds of the water works have been curbed with stone and laid with asphaltic cement. Lake park has been curbed on Michigan avenue, and sidewalks laid with asphaltic concrete.

The river has been widened and docked at Twenty-second street, and the channel of the river dredged at such points as required.

The bridges have undergone thorough repairs, the details of which will be found in the following report :

CHICAGO, March 31st, 1874.

GEORGE W. WILSON, Esq.,

Superintendent Streets and Bridges.

DEAR SIR : — I herewith submit my report for repairs in the bridge department for the year ending March 31st, 1874.

The bridges and protections are mostly in good condition ; some of the wooden bridges are old, but they are all safe, and no danger need be apprehended from any of them.

There has been a large amount expended during the past year on the centre protections and fenders ; these appendages to the bridges absorb the greater part of the annual outlay, owing to the constant increase in size and weight of the vessels and propellers built, the wear and tear from which is enormous, and has to be met by a corresponding increase in expenditure. Consequently the most of the protections have been strengthened by bolting on extra timbers at the points most exposed, and in some cases the entire length of the protection, with two courses of timber, and in others, as at Rush street, with three courses.

The centre protection at Kinzie street bridge was thoroughly repaired during the past year at an outlay of between fourteen and fifteen hundred dollars.

New approaches have been built and fender clamps driven at each end of Ashland avenue bridge, at an outlay of over fourteen hundred dollars. This bridge is in good condition and will last for years. In addition to the heavy damages to the centre protections and fenders within the past year, there has been a large number of collisions at different bridges ; in fact all have received more or less damage from this source, State street bridge, as usual, receiving the largest amount. Among the whole number damaged in this way may be mentioned the bridges at Rush, Lake, Randolph, Madison, Twenty-second, Van Buren and Division streets, as

having been the most seriously injured with a corresponding expenditure for repairs. Owing to the peculiar location and exposed position of State street bridge, and the situation of Wells street bridge in relation to the lumber market, and the large number of vessels always lying at the foot of Franklin street, blocking up the channel, vessels in transit were daily coming in contact with them, and it was found impossible to keep up the iron railing, consequently it was taken down and wooden railing substituted. The expenditures at Rush street bridge were largely increased the past year by the breaking of the turn table last winter. The protection has likewise been thoroughly repaired this spring.

The bridge protections that have been strengthened as before described, are at Rush, State, Clark, Wells, Lake, Randolph, Madison, Adams, Van Buren, Polk, Twelfth, Eighteenth, Twenty-second, South Halsted, Main, Kinzie and Division street bridges.

The expenditures at Lake street bridge were largely increased by permanent improvements that had to be done in connection with the new approaches that were built.

The following is a correct exhibit of the expenditures for each bridge during the past year.

Rush street bridge.....	\$ 1,710.06
State street bridge.....	1,603.36
Clark street bridge.....	1,066.95
Wells street bridge.....	1,211.29
Lake street bridge.....	1,400.90
Randolph street bridge.....	1,590.72
Madison street bridge.....	1,671.85
Adams street bridge.....	747.08
Van Buren street bridge.....	755.16
Polk street bridge.....	570.50
Twelfth street bridge.....	1,067.88
Eighteenth street bridge.....	1,037.52
Twenty-second street bridge.....	624.98
South Halsted street bridge.....	291.74
Main street bridge.....	321.87
Amount carried forward.....	<u>\$15,671.86</u>

Amount brought forward.....	\$15,671. 86
Archer avenue bridge.....	286.78
Thirty-fifth street bridge	16.86
Fuller street bridge.....	595.75
Ashland avenue bridge.....	1,587.78
Western avenue bridge.....	76.11
Kedzie avenue bridge.....	355.14
Kinzie street bridge.....	1,901.54
Indiana street bridge.....	530.92
Erie street bridge.....	518.84
Chicago avenue bridge.....	437.08
North Halsted street bridge.....	469.28
Canal Division street bridge	429.90
Division street bridge	748.85
North avenue bridge.....	359.16
Clybourn place bridge.....	425.66
Total	\$24,411.51

Respectfully submitted,

GEO. R. BRAMHALL,

In charge of Bridge Repairs.

BRIDGES BUILT DURING THE PAST YEAR.

The bridges built during the year are located at Clybourn place and Thirty-fifth street.

CLYBOURN PLACE BRIDGE.

Superstructure of the "Combination Howe Truss,"
with iron turn-table. Length 140 feet. Cost..... \$13,700.00

THIRTY FIFTH STREET (Douglas Place) BRIDGE.

Superstructure of the "Combination Howe Truss,"
with iron turn-table. Length 140 ft. Cost..... \$9,800.00
Abutments and iron approach spans to Lake street bridge
have been erected at a cost of \$27,924.21.

VIADUCTS.

The viaducts built during the year are on Canal street, crossing Sixteenth street ; and on Twelfth street, crossing Beech street.

THE CANAL STREET VIADUCT,

Is a substantial iron superstructure, 300 feet in length and 64 feet in width inclusive. Total cost, including approaches and raising buildings to grade \$125,562.27, of which \$93,000.00 was paid by the Chicago, Burlington and Quincy, and the Chicago and Northwestern Railroads.

THE TWELFTH STREET VIADUCT.

Is an iron superstructure 58 feet in length. Cost, including raising buildings to grade, \$32,506.48, of which the Pittsburgh and Fort Wayne Railway Company paid \$25,000.00.

STREETS.

The number of miles of improved streets in the city is 102.40, as follows :

Wooden block pavement.....	78. ³⁶⁹⁴ ₅₂₈₀ miles.
Gravelled	8. ²⁷¹³ ₅₂₈₀ miles.
Macadamized	6. ⁸⁷² ₅₂₈₀ miles.
Boulder and stone blocks.....	1. ⁷¹⁸ ₅₂₈₀ miles.
Cindered	8. ²³⁴⁵ ₅₂₈₀ miles.

Total102.⁵⁰⁶²₅₂₈₀ miles.

There were over 400 special permits issued during the year for opening pavement in improved streets for introduction and repairs of water, gas and drain pipes, besides a large amount taken up by sewerage and water departments and gas companies. The

replacement of this forms an important item in the cost of keeping the streets in repair.

The amount of cleaning done during the year by the contractors, was as follows :

South Division..... 865.31 miles @ \$30 $\frac{1}{2}$ mile, \$25,959.30
 North Division..... 534.17 miles @ 30 $\frac{1}{2}$ mile, 16,025.10
 West Division..... 1,152.74 miles @ 30 $\frac{1}{2}$ mile, 34,582.00

Total No. miles cleaned 2,552.22 Total cost.....\$76,566.60

The table following to which I respectfully call your attention, shows the cost of cleaning and repairing improved streets :

STREET CLEANING AND REPAIRS.

DIVISION.	Cleaning improved streets.	Cleaning and Repairing Streets.	Lumber.	Tools, Nails, Spikes & Hardware	Gravel, Macadam and Cinders.	Filling.	Repair's Tools.	Tunnel cleaning, charged to Street cleaning.	Miscellaneous.
North	\$16,025.10	\$44,900.07	\$5,575.21	\$583.58	\$1,192.00	\$30.00	.....	.....	.....
South	25,959.30	50,584.39	11,290.42	775.40	11,200.69	247.00	\$244.10	\$512.50	\$638.50
West.....	34,582.20	92,992.11	15,192.81	2,118.42	5,144.82	2,388.58	267.65	737.50	215.67
Total.....	\$76,566.60	\$188,476.57	\$32,058.44	\$3,477.40	\$17,537.51	\$2,665.58	\$611.75	\$1,250.00	\$854.17

The table following to which I also desire to call your attention, shows the character of the work done under the head of repairs :

	NORTH DIVISION.			SOUTH DIVISION.			WEST DIVISION.			
	No.	Yards.	Lumber FEET.	No.	Yards.	Lumber. OAK. PINE.	No.	Yards.	Ft. in length.	Lumber. OAK. PINE.
Aprons.....	873	.....	79,041	401	.....	.....	1,426	.....	.....	.....
Street crossings.....	227	.....	46,494	192	.....	.....	1,191	.....	.....	.....
Alley crossings.....	312	.....	42,458	46	.....	.....	179	.....	.....	.....
Alley bridges.....	.....	.....	.....	57	.....	.....	44	.....	.....	.....
Alley culverts.....	104	.....	70	.....	.....	.....	336	.....	.....	.....
Paving, general repairs.....	.....	13,049	.....	44,088	.....	.....	13,466	.....	.....	.....
Paving, for Gas Co.....	.....	229	.....	221	.....	.....	505	.....	.....	.....
Paving, for Teleg'ph Co.....	.....	.....	.....	35	.....	.....	63	.....	.....	.....
Paving, for str't permits.....	.....	889	.....	1,646	.....	.....	249	.....	.....	.....
Paving, for str't railway.....	.....	.....	.....	24	.....	.....	.....	.....	.....	.....
Paving, for sewer dep't.....	.....	.....	.....	1,211	.....	.....	350	.....	.....	.....
Paving, for water dep't.....	.....	.....	.....	2,107	.....	.....	.....	.....	.....	.....
Paving bridge app'r'ches.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sidewalk steps.....	332	.....	27,556	.....	.....	.....	.....	.....	.....	.....
Drain boxes.....	198	.....	23,800	.....	.....	.....	.....	.....	.....	.....
Sidewalks.....	.....	.....	24,352	.....	.....	.....	.....	.....	.....	.....
Bailing.....	.....	.....	16,344	.....	.....	.....	.....	.....	.....	.....
Intersect'ns of sidewalks.....	19	.....	15,379	.....	.....	.....	.....	.....	.....	.....
Plank'g at Water Works.....	.....	.....	11,151	.....	.....	.....	.....	.....	.....	.....
General repairs.....	.....	.....	28,589	.....	.....	.....	.....	.....	.....	.....
Stone paving.....	.....	965	.....	.....	.....	.....	.....	.....	.....	.....
Lumber for paving.....	.....	.....	14,167	.....	.....	.....	.....	.....	.....	.....
Strips.....	.....	.....	5,000	.....	.....	.....	4,500	.....	.....	.....
Total.....	.....	.....	334,590	.....	.....	72,232 698,833	.....	.....	.....	192,421 521,47

PUBLIC BUILDINGS.

The following buildings were erected and alterations made during the year:

Engine house and police station, corner Larrabee street and North avenue, two story and basement, brick, 47x97 feet. Cost.....	\$19,555 55
Engine house on Chicago avenue, near Kingsbury street, two story and basement, brick, 45x96. Cost.	17,316.18
Engine house on Twelfth street, opposite May street, two story and basement, brick, 45x96. Cost.....	18,580.05
Police station on Chicago avenue, two story and basement, brick, 37x100. Cost.....	24,120.98
Police station corner Pacific avenue and Harrison street, two story and basement, brick, 80x101. Cost.....	44,173.75
Engine house, corner Washington and Clinton streets, three story and basement, brick, 30x76. Cost.....	9,826.00
Alterations to Madison street police station. Cost.....	5,093.14
Small pox hospital at Bridewell grounds, two story, brick, dead-house and barn. Cost.....	15,700.00
Alterations to Union Park police station. Cost.....	4,064.00

HARBOR.

Although the channel of the river at the commencement of the season showed many shallow places, we have been able to keep the same in fair navigable condition. A channel has been dredged from Western avenue to the bridewell eight feet in depth.

The amount of dredging during the year was 78,562.25 cubic yards. Cost \$67,735.10.

Respectfully submitted,

GEO. W. WILSON,

Superintendent.

STATEMENT OF ASSESSMENTS FOR WOODEN BLOCK PAVEMENT.

No. Warrant.	Name of Street.	From	To	Amount of Assessm't.
2017	North La Salle st.....	Michigan st.....	Chicago av.....	\$ 23,993.30
2027	Kinzie st.....	N. Clark st.....	N. State st.....	8,269.97
2028	Kinzie st.....	N. Wells st.....	N. Clark st.....	9,014.33
2034	Cottage Grove ave.....	Twenty-second st.....	Thirtieth st.....	46,564.06
2035	Harmon st.....	State st.....	Michigan ave.....	5,112.94
2036	Hubbard st.....	State st.....	Michigan ave.....	5,830.90
2037	Congress st.....	State st.....	Michigan ave.....	5,785.13
2049	Twenty-ninth st.....	State st.....	Cottage Grove ave.....	21,969.47
2050	Peck ct.....	State st.....	Michigan ave.....	5,918.44
2054	Eldridge ct.....	State st.....	Michigan ave.....	5,938.55
2060	Twenty second st.....	State st.....	Wentworth ave.....	15,212.85
2061	Calhoun pl.....	Clark st.....	Dearborn st.....	1,186.47
2105	Jefferson st.....	W. Van Buren st.....	W. Harrison st.....	14,347.15
2106	Blue Island ave.....	W. Twelfth st.....	Rebecca st.....	50,458.07
2107	Vernon ave.....	Twenty-ninth st.....	Thirtieth st.....	8,161.03
2108	Peoria st.....	W. Lake st.....	W. Harrison st.....	34,529.42
2109	Fifth ave.....	Randolph st.....	Madison st.....	10,172.88
2124	Milwaukee ave.....	W. Division st.....	North av.....	3,657.33
2128	N. Sheldon st.....	N. 50 ft. of S. 100 feet Block 5.	Union Park, 2d add.....	548.57
2129	Clinton st.....	W. Van Buren st.....	W. Harrison st.....	1,916.92
2161	Silver st.....	W. Harrison st.....	Gurley st.....	3,203.36
2162	Newberry av.....	West Taylor st.....	W. Twelfth st.....	8,167.59
2163	Wabash ave.....	Thirty-second st.....	Douglas ave.....	23,846.75
2165	N. Franklin st.....	Chicago ave.....	Division st.....	14,044.72
2166	Eagle st.....	Desplaines st.....	Halsted st.....	10,512.03
2167	S. Dearborn.....	Twenty-seventh st.....	Twenty-ninth st.....	7,645.13
2205	Price pl.....	Desplaines st.....	Halsted st.....	12,547.37
2206	N. Union st.....	Hubbard st.....	W. Erie.....	14,633.61
2207	Peoria st.....	W. Lake st.....	Fulton st.....	4,636.96
2208	Jackson st.....	State st.....	Michigan ave.....	6,647.55
2273	Park ave.....	Leavitt st.....	Western ave.....	10,999.46
2319	Pearce st.....	Desplaines st.....	Halsted st.....	7,169.07
2320	Fifth ave.....	Randolph st.....	N. Water st.....	8,211.59
2321	Twenty-fifth st.....	State st.....	Wabash ave.....	3,863.80
2342	West Indiana st.....	Noble st.....	Bobey st.....	35,044.46
2356	Charles pl.....	Fifth ave.....	Franklin st.....	968.07
2357	W. Indiana st.....	Robey st.....	Hoynes ave.....	5,746.55
2358	Congress st.....	Fifth ave.....	Franklin st.....	4,839.46
2359	S. Dearborn st.....	Twenty-ninth st.....	Thirtieth st.....	7,450.83
2360	State st.....	N. ½ lot 1 and 2.....	Blk. 140, school section.....	585.09
2362	Wabash av.....	Sundry lots.....		1,029.73
TOTAL.....				\$471,020.95

STATEMENT OF ASSESSMENTS FOR MISCELLANEOUS STREET AND ALLEY IMPROVEMENTS.

No. Warrant.	Nature of Improvement.	Name of Street.	From	To	Amount of Assessments.
1936	Graveling.....	Michigan ave.....	29th st.....	30th st.....	\$ 4,442.22
2018	Curb wall and filling.....	N. Franklin st.....	Chicago ave.....	Division st.....	16,464.54
2127	Curbing.....	Foster st.....	W. Harrison st.....	W. Polk st.....	533.00
2130	Grading and planking.....	Alley.....	27th st.....	29th st.....	1,982.52
2131	Walling and filling.....	Sedgwick st.....	Erie st.....	Chicago ave.....	4,429.63
2132	Walling and filling.....	Townsend st.....	Chicago ave.....	White st.....	8,714.88
2148	Curbing, filling and cinderling.....	Alley.....	Block 3 Murray's addition.....		1,426.52
2149	Filling and cinderling.....	Alley..... S. ½ B.	3 Sampson and Green's addition.....		1,708.54
2150	Grading and planking.....	Alley.....	27th st.....	29th st.....	1,622.46
2164	Walling and filling.....	West 14th st.....	Stewart ave.....	Centre ave.....	55,346.65
2169	Walling.....	Franklin st.....	Van Buren st.....	Harrison st.....	4,086.45
2270	Walling and filling.....	Third ave.....	12th st.....	14th st.....	9,360.41
2318	Grading and planking.....	Rundell pl.....	Aberdeen st.....	Centre ave.....	999.60
2328	Plankinf.....	Marble pl.....	Dearborn st.....	State st.....	977.55
2361	Curbing.....	La Fayette pl.....	N. Clark st.....	N. Dearborn st.....	338.83
2363	Curbing.....	Washington pl.....	N. Clark st.....	N. Dearborn st.....	338.83
Total.....					\$112,472.63

STATEMENT OF ASSESSMENTS FOR THE ERECTION OF LAMP POSTS.

No. Warrant.	No. Posts.	Name of Street.	From	To	Amount of Assessm't.
1890	1	Intersection of.....	Larrabee and.....	Clark st.....	\$ 41.00
1891	5	Fourth ave.....	Taylor st.....	Twelfth st.....	180.00
1892	8	Thirty-second st.....	South Park ave.....	Rhodes ave.....	288.00
1893	11	Schiller st.....	N. Clark st.....	N. Franklin st.....	396.00
1894	11	Thirty-eighth st.....	Cottage Grove ave.....	Vincennes ave.....	396.00
1895	3	Franklin st.....	Madison st.....	Monroe st.....	108.00
1896	8	Sigol st.....	N. Wells st.....	Sedgwick st.....	288.00
1897	2	Fourth ave.....	Polk st.....	Taylor st.....	109.50
1898	10	Larrabee st.....	Menomonee st.....	400 ft. N. of North ave.....	360.00
1899	3	Thirty-first st.....	S. Dearborn st.....	Butterfield st.....	108.00
1900	2	Goethe st.....	N. Clark st.....	N. Dearborn st.....	72.00
1901	11	Larrabee st.....	Crosby st.....	Division st.....	396.00
1902	2	Fourth ave.....	Jackson st.....	Van Buren st.....	84.50
1903	27	S. Dearborn st.....	Twenty-ninth st.....	Thirty-third st.....	912.00
1904	9	Illinois st.....	N. Wells st.....	Kingsbury st.....	324.00
1905	16	Butterfield st.....	Thirtieth st.....	Thirty-third st.....	676.00
1906	23	N. Market st.....	Chicago ave.....	Division st.....	788.00
1907	33	Clark st.....	Fourteenth st.....	Twenty-second st.....	1,088.00
1908	1	Burling st.....	125 ft. S. of.....	Belden ave.....	41.00
1909	16	Wabash ave.....	Thirty-third st.....	Douglas ave.....	576.00
1910	6	N. Franklin st.....	Menomonee st.....	Wisconsin st.....	216.00
1911	3	Belden place.....	.....	.....	108.00
1912	2	Michigan st.....	.....	St. Clair st.....	72.00
1913	16	State st.....	Randolph st.....	Monroe st.....	576.00
1914	3	Langley st.....	Egan ave.....	250 ft. N.....	108.00
1917	33	Maxwell st.....	Canal st.....	Blue Island ave.....	1,152.00
1918	3	W. Polk st.....	Blue Island ave.....	Halsted st.....	108.00
1919	3	River st.....	Michigan ave.....	300 ft. E.....	108.00
1940	12	W. Twenty-second st.....	Bridge.....	Union st.....	420.00
1941	17	State st.....	Thirty second st.....	Douglas ave.....	596.00
1942	22	Cottage Grove ave.....	Douglas ave.....	Egan ave.....	770.00
1943	1	Green st.....	W. Washington st.....	W. Madison st.....	36.00
1944	4	Vernon ave.....	250 ft. N. of Thirty-second st.....	250 ft. S. of Thirty-second st.....	140.00
1945	2	Rhodes ave.....	Douglas ave.....	University place.....	70.00
1946	2	Thirty-first st.....	State st.....	Burnside st.....	70.00
1947	2	May st.....	W. Lake st.....	W. Randolph st.....	70.00
1948	2	N. La Salle st.....	N. Water st.....	Chicago ave.....	245.00
1949	7	Paulina st.....	W. Jackson st.....	W. Van Buren st.....	70.00
1950	9	Pine st.....	Chicago ave.....	Walton place.....	315.00
1951	3	Indiana ave.....	Thirteenth st.....	280 ft. N.....	105.00
1952	3	Pacific ave.....	Polk st.....	330 ft. S.....	105.00
1953	2	Clark st.....	Randolph st.....	Washington st.....	70.00
1954	4	Larrabee st.....	Grant place.....	Webster ave.....	140.00
1955	9	Peoria st.....	W. Madison st.....	W. Adams st.....	515.00
1956	5	Sedgwick st.....	Sophia st.....	Centre st.....	175.00
1957	41	Milwaukee ave.....	Division st.....	North ave.....	1,435.00
1958	11	Brown st.....	W. Twelfth st.....	W. Fourteenth st.....	385.00
1959	16	Newberry ave.....	Maxwell st.....	G. & C. E. B.....	560.00
1960	5	Fulton st.....	Leavitt st.....	Irving place.....	175.00
1961	3	Silver st.....	W. Harrison st.....	Gurley st.....	105.00
1962	3	Wood st.....	Hubbard st.....	Indiana st.....	105.00
1963	5	E. Pearson st.....	Rush st.....	200 ft. E. of Pine st.....	175.00
1964	3	Wood st.....	W. Adams st.....	W. Monroe st.....	105.00
1965	6	Lincoln ave.....	Larrabee st.....	Belden ave.....	210.00
1966	6	Johnson st.....	Maxwell st.....	W. Twelfth st.....	210.00
1967	20	Morgan st.....	W. Harrison st.....	W. Twelfth st.....	700.00
1968	7	Mather st.....	Desplaines st.....	Halsted st.....	245.00
1969	9	Twentieth st.....	State st.....	Indiana ave.....	315.00
1970	19	Sedgwick st.....	North ave.....	Wisconsin st.....	665.00
1971	3	Thirteenth st.....	Michigan ave.....	Indiana ave.....	105.00
1972	13	W. Taylor st.....	Canal st.....	Halsted st.....	455.00
2020	10	Market st.....	Lake st.....	Madison st.....	360.00
2021	3	Twenty-third st.....	Calumet ave.....	South Park ave.....	113.00
2022	12	Indiana ave.....	Thirty-third st.....	Douglas ave.....	432.00
2023	12	State st.....	Harrison st.....	Twelfth st.....	469.50
2024	19	Walnut st.....	Hoyle ave.....	Western ave.....	684.00
2025	6	Marshfield ave.....	W. Indiana st.....	W. Congress st.....	216.00
2026	2	Indiana ave.....	Thirteenth st.....	200 feet.....	77.00
2029	8	Johnson st.....	N. terminus.....	S. terminus.....	288.00
2030	16	May st.....	W. Harrison st.....	W. Twelfth st.....	576.00
2031	6	Johnson st.....	W. Taylor st.....	W. Twelfth st.....	216.00
2032	5	Brown st.....	W. Taylor st.....	W. Twelfth st.....	180.00
2033	8	Throop st.....	W. Taylor st.....	W. Twelfth st.....	288.00
654			Amounts carried forward.....		\$23,146.50

STATEMENT OF ASSESSMENTS FOR THE ERECTION OF LAMP POSTS.—
CONTINUED.

No. Warrant.	No. Posts.	Name of Street.	From	To	Amount of Assessm't.
	654		Amounts brought forward.....		\$23,146.50
2038	6	Forquer st.	Halsted st.	Blue Island ave.	216.00
2039	2	Honore st.	W. Jackson st.	W. Van Buren st.	77.00
2040	2	Elizabeth st.	W. Washington st.	W. Randolph st.	77.00
2041	3	Morgan st.	W. Randolph st.	W. Lake st.	113.00
2042	4	Wood st.	Warren ave.	W. Monroe st.	146.50
2043	2	May st.	Fulton st.	W. Lake st.	77.00
2044	4	Peoria.	Fulton st.	W. Madison st.	146.50
2045	3	Bowen st.	W. Van Buren st.	William st.	113.00
2046	6	Smith st.	Ashland ave.	Paulina st.	216.00
2047	6	Morgan st.	W. Van Buren st.	W. Harrison st.	216.00
2048	5	Western ave.	Larrabee st.	Orchard st.	180.00
2051	1	N. E. corner.	Chicago ave.	Wesson st.	41.00
2056	13	Blue Island ave.	W. Fourteenth st.	W. Sixteenth st.	468.00
2056	18	Morgan st.	W. Twelfth st.	W. Sixteenth st.	648.00
2057	37	W. Fourteenth st.	Stewart ave.	Centre ave.	1,247.00
2058	7	S. Dearborn st.	Twenty-seventh st.	Twenty-ninth st.	352.00
2059	28	W. Thirteenth st.	Blue Island ave.	Ashland ave.	968.00
2146	28	Noble st.	Milwaukee ave.	North ave.	968.00
2147	22	Elston ave.	North ave.	W. Clybourn place.	782.00
2156	3	Bremer st.	Hobbs st.	Oak st.	113.00
2157	4	Chicago ave.	Pine st.	450 ft. E. of Pine st.	146.50
2158	11	Forest ave.	Thirty-first st.	Thirty-third st.	396.00
2159	4	Prospect place.	Vincennes ave.	Cottage Grove ave.	146.50
2160	4	Carroll ave.	Ashland ave.	Paulina st.	146.50
2271	6	W. Monroe st.	Western ave.	Campbell ave.	209.94
2272	23	Blue Island ave.	W. Sixteenth st.	W. Twenty-second st.	789.77
2274	1	W. Lake st.	Clinton st.	Jefferson st.	39.99
2275	23	Ashland ave.	Cornell st.	Milwaukee ave.	789.77
2276	3	Irving place.	W. Adams st.	Alley N.	109.97
2277	11	State st.	Monroe st.	Harrison st.	459.89
2278	3	Wentworth ave.	Twenty-first st.	Twenty-second st.	109.97
2279	2	N. Curtis st.	Hubbard st.	W. Indiana st.	74.98
2280	7	Eagle st.	Desplaines st.	Halsted st.	244.93
2281	6	Pearce st.	Desplaines st.	Halsted st.	209.94
2282	9	N. Union st.	Hubbard st.	W. Erie st.	314.91
2283	12	W. Indiana st.	Lincoln st.	Hoyne ave.	419.88
2284	11	Webster ave.	N. Clark st.	Larrabee st.	384.89
2285	6	Towusend st.	White st.	Oak st.	174.95
2286	6	Bremer st.	Oak st.	800 ft. N. of Chicago ave.	209.94
2287	2	Thirty-second st.	Wabash ave.	Michigan ave.	74.98
2288	3	Fontenoy place	Milwaukee ave.	Park st.	109.97
2289	2	Chestnut st.	N. La Salle st.	N. Wells st.	74.98
2290	2	Elm st.	N. Franklin st.	N. Market st.	74.98
2291	2	Carroll ave.	Ada st.	Sheldon st.	74.98
2292	3	W. Adams st.	Leavitt st.	Irving place.	109.97
2336	12	Macalister place.	Centre ave.	Loomis st.	419.88
2337	8	Thirty-third st.	Cottage Grove ave.	Vernon ave.	279.92
2338	2	Leavitt st.	W. Monroe st.	W. Adams st.	74.98
2339	3	W. Monroe st.	Leavitt st.	350 feet W.	109.97
2340	7	Elston ave.	W. Clybourn place.	Armitage road.	244.93
2341	5	Vincennes ave.	Thirty-eighth st.	Egan ave.	174.95
2343	6	Vernon ave.	Douglas ave.	Twenty-seventh st.	209.94
2344	7	Rawson st.	Elston ave.	McHenry st.	244.93
2345	2	Randolph st.	State st.	Wabash ave.	87.48
2346	3	Orchard st.	Webster ave.	250 feet s. of Belden ave.	109.97
2347	13	W. Erie st.	Milwaukee ave.	Rucker st.	454.87
2348	2	Lincoln st.	W. Adams st.	W. Jackson st.	74.98
2349	2	Twenty-fifth st.	S. Park av.	Lake ave.	74.98
2350	2	Twenty-fifth st.	Michigan ave.	Indiana ave.	74.98
2351	3	W. Congress st.	Marshfield ave.	Paulina st.	109.97
2352	4	McHenry st.	Rawson st.	Waubansia ave.	142.46
2353	2	Hermitage ave.	W. Jackson st.	W. Van Buren st.	74.97
2354	3	Gilpin pl.	Centre ave.	Lytle st.	109.97
Total	1106				\$39,184.71

STATEMENT OF ASSESSMENTS FOR LAYING PRIVATE DRAINS.

No. Warrant.	Name of Street.	From	To	Amount of Assessments.
1927	Michigan ave.....	Twenty-ninth st.....	Thirtieth st.....	860.19
1928	W. Indiana st.....	Desplaines st.....	Noble st.....	552.06
1929	W. Monroe st.....	Canal st.....	Halsted st.....	160.25
1930	Michigan ave.....	Thirtieth st.....	Douglas ave.....	3,794.88
1931	N. Halsted st.....	Milwaukee ave.....	N. Branch Chicago River...	281.25
1932	Fulton st.....	Clinton st.....	Sangamon st.....	740.19
1933	W. Randolph st.....	Halsted st.....	Union Park.....	3,228.75
1934	Loomis st.....	Madison st.....	Van Buren st.....	547.75
1935	Pine st.....	Chicago ave.....	Walton pl.....	325.80
1973	Oak st.....	N. Clark st.....	Larrabee st.....	345.46
1974	Green st.....	Fulton st.....	W. Harrison st.....	1,337.41
1975	Sheldon st.....	W. Randolph st.....	W. Madison st.....	172.84
1976	W. Jackson st.....	Canal st.....	Halsted st.....	516.50
1977	W. Adams st.....	Ashland ave.....	Robey st.....	1,470.15
1978	W. Monroe st.....	Halsted st.....	Aberdeen st.....	383.00
1979	W. Chicago ave.....	Milwaukee ave.....	Ashland ave.....	694.00
1980	W. Chicago ave.....	Milwaukee ave.....	L. 7 B. 99 Elston's add.....	1,195.17
1981	Union Park pl.....	W. Lake st.....	Depot pl.....	177.50
1982	Canalport ave.....	Halsted st.....	W. Twenty-second st.....	456.20
1983	W. Twelfth st.....	Halsted st.....	Centre ave.....	306.86
1984	Depuyster st.....	Desplaines st.....	Halsted st.....	208.54
1985	Peoria st.....	Fulton st.....	W. Van Buren st.....	1,238.56
1986	W. Harrison st.....	Halsted st.....	Centre ave.....	688.25
1987	Warren ave.....	Ashland avenue.....	Leavitt st.....	1,467.10
1988	Milwaukee ave.....	Division st.....	Division st.....	1,304.63
1989	Ontario st.....	N. Clark st.....	Kingsbury st.....	786.06
1990	Michigan st.....	Pine st.....	St. Clair st.....	231.80
1991	Larrabee st.....	Chicago ave.....	Clybourn ave.....	475.25
1992	North ave.....	N. La Salle st.....	N. Dearborn st.....	219.70
1993	Third ave.....	Jackson st.....	Twelfth st.....	663.00
1994	N. Wells st.....	Division st.....	N. Clark st.....	3,409.66
1995	Illinois st.....	State st.....	St. Clair st.....	571.27
1996	Twenty-eighth st.....	State st.....	Wabash ave.....	133.34
1997	Illinois st.....	N. Wells st.....	Kingsbury st.....	221.63
1998	Sedgwick st.....	Chicago ave.....	Division st.....	104.98
1999	Superior st.....	N. Clark st.....	Kingsbury st.....	636.21
2000	W. Lake st.....	Ashland ave.....	Robey st.....	3,709.33
2001	W. Lake st.....	Robey st.....	Western ave.....	2,625.78
2002	Calumet ave.....	Cottage Grove ave.....	Twenth-ninth st.....	1,005.60
2003	E. Pearson st.....	Rush st.....	S. L. 7, L. 10 B. 20 Sec. 3...	83.15
2004	Frairie ave.....	Twenty-ninth st.....	Thirtieth st.....	1,036.93
2005	Franklin st.....	Adams st.....	Van Buren st.....	183.35
2006	Twenty-eighth st.....	Wabash ave.....	Michigan ave.....	136.30
2007	N. Market st.....	Chicago ave.....	Division st.....	84.28
2008	Calumet ave.....	Twentieth st.....	Twenty-first st.....	167.55
2009	Fourth ave.....	Jackson st.....	Twelfth st.....	535.02
2010	Twentieth st.....	State st.....	Calumet ave.....	174.51
2011	Twenty-third st.....	State st.....	South Park ave.....	506.92
2012	Twenty-fourth st.....	Wabash ave.....	Calumet ave.....	122.22
2013	Taylor st.....	Fifth ave.....	Clark st.....	175.60
2014	Quincy st.....	Clark st.....	Market st.....	131.54
2015	Douglas ave.....	South Park ave.....	I. C. R. R.....	1,133.25
2016	Twenty-second st.....	State st.....	Grove st.....	479.14
2052	W. Washington st.....	Ashland ave.....	Leavitt st.....	1,863.38
2125	Milwaukee ave.....	W. Division st.....	North ave.....	1,753.50
2151	Peoria st.....	W. Van Buren st.....	W. Harrison st.....	730.25
2152	Price pl.....	Desplaines st.....	Halsted st.....	825.50
2153	Newberry ave.....	W. Taylor st.....	W. Twelfth st.....	1,428.75
2154	Vernon ave.....	Twenty-ninth st.....	Thirtieth st.....	539.75
2155	Cottage Grove ave.....	Twenty-second st.....	Thirtieth st.....	5,076.50
2333	N. Franklin st.....	Chicago ave.....	Division st.....	857.25
2334	Blue Island ave.....	W. Twelfth st.....	Rebecca st.....	2,609.75
Total.....				57,850.69

STATEMENT OF ASSESSMENTS FOR LAYING WATER SERVICE PIPES.

No. Warrant.	Name of Street.	From	To.	Amount of Assessm't.
1915	Superior st.....	N. Clark st.....	N. State st.....	225.40
1916	Calumet ave.....	Twentieth st.....	Twenty-first st.....	104.16
1917	Blue Island ave.....	Twelfth st.....	Sixteenth st.....	1,098.28
1918	Michigan ave.....	Thirtieth st.....	Douglas ave.....	3,360.25
1919	Pine st.....	Chicago ave.....	Walton pl.....	589.89
1920	Cottage Grove ave.....	Twenty-second st.....	Twenty-sixth st.....	1,242.49
1921	E. Pearson st.....	Rush st.....	E. line S. L. 7, L. 10 B. 20..	141.67
1922	Twenty-eighth st.....	State st.....	Wabash ave.....	190.08
1923	Michigan ave.....	Twenty-ninth st.....	Thirtieth st.....	691.75
1924	Twentieth st.....	State st.....	I. C. R. R.....	416.90
1925	Twenty-third st.....	State st.....	S. Park ave.....	393.08
1926	Oak st.....	N. Wells st.....	Larrabee st.....	315.84
2019	Cottage Grove ave.....	Twenty-sixth st.....	Thirtieth st.....	1,813.25
2062	Peoria st.....	Fulton st.....	W. Harrison st.....	1,763.58
2063	Market st.....	Lake st.....	Randolph st.....	762.63
2123	Clark st.....	Jackson st.....	Folk st.....	2,053.50
2126	Milwaukee ave.....	W. Division.....	North ave.....	1,737.20
2324	W. Chicago ave.....	Milwaukee ave.....	Ashland ave.....	1,640.28
2335	N. Franklin st.....	Chicago ave.....	Division st.....	592.50
2355	Lake ave.....	Douglas ave.....	Egan av.....	3,175.95
Total.....				\$22,608.68

STATEMENT OF ASSESSMENTS FOR LAYING GAS SERVICE PIPES.

No. Warrant.	Name of Street.	From	To	Amount of Assessm't
2325	Jefferson st.....	W. Van Buren st.....	W. Harrison st.....	565.80
2326	W. Monroe st.....	Canal st.....	Halsted st.....	743.85
2327	W. Jackson st.....	Canal st.....	Halsted st.....	805.35
2328	W. Madison st.....	Centre ave.....	Robey st.....	1,681.20
2329	N. Sangamon st.....	Fulton st.....	Milwaukee ave.....	1,289.35
2330	Park ave.....	Ashland ave.....	Leavitt st.....	1,039.95
2331	W. Twelfth st.....	Canal st.....	Lumber st.....	414.70
2332	N. Halsted st.....	W. Lake.....	W. Indiana.....	705.05
Total.....				\$7,245.52

STATEMENT OF ASSESSMENTS FOR THE CONSTRUCTION OF SIDEWALKS.

No. Warrant.	Side of Street.	Name of Street.	From	To	Amount of Assessm't.
2053	East	Michigan ave.....	Thirty-sixth st.....	Thirty-seventh st.....	104.44
2064	Both	Centre st.....	N. Clark st.....	Sedgwick st.....	128.28
2065	Both	N. State st.....	Kinzie st.....	Chicago ave.....	188.42
2066	Both	Ontario st.....	N. Clark st.....	Pine st.....	70.51
2067	Both	Ohio st.....	N. Clark st.....	Pine st.....	153.79
2068	Both	Erie st.....	N. Clark st.....	Pine st.....	141.50
2069	Both	Huron st.....	N. Clark st.....	Pine st.....	214.53
2070	Both	Oak st.....	N. State st.....	Pine st.....	229.17
2071	West	N. Dearborn st.....	Illinois st.....	North ave.....	810.23
2072	West	N. Clark st.....	North ave.....	Fullerton ave.....	704.70
2073	Both	Twenty-ninth st.....	Cottage Grove ave.....	Lake ave.....	283.82
2074	South	Douglas ave.....	Stewart ave.....	Wallace st.....	224.54
2075	Both	N. Franklin st.....	North ave.....	Sigol st.....	129.75
2076	Both	Schiller st.....	N. Clark st.....	Sedgwick st.....	244.07
2077	Both	Siegel st.....	N. Wells st.....	Hurlbut st.....	60.98
2078	Both	Goethe st.....	N. Wells st.....	Sedgwick st.....	104.02
2079	Both	Granger st.....	N. Wells st.....	Sedgwick st.....	128.01
2080	Both	Hurlbut st.....	North ave.....	Olybourn ave.....	115.08
Amount carried forward.....					4,033.84

THIRTEENTH ANNUAL REPORT OF

STATEMENT OF ASSESSMENTS FOR THE CONSTRUCTION OF
SIDEWALKS—CONTINUED.

No. of War-rant.	Side of Street.	Name of Street.	From	To	Amount of Assessm'ts
			Amount brought forward.....		4,033.84
2081	Both	Mohawk st.....	North ave.....	Clybourn ave.....	52.89
2082	South	North ave.....	Orchard st.....	N. Dearborn st.....	41.49
2083	Both	Rees st.....	Larrabee st.....	Halsted st.....	140.05
2084	Both	Orchard st.....	North ave.....	Clybourn ave.....	54.24
2085	Both	Otis st.....	Division st.....	Vedder st.....	43.47
2086	Both	Pleasant st.....	Division st.....	Vedder st.....	60.21
2087	Both	Penn st.....	Division st.....	Vedder st.....	99.00
2088	Both	Gardner st.....	Vine st.....	N. Halsted st.....	163.70
2089	West	Quinn st.....	Thirty-first st.....	Stearns st.....	45.06
2090	East	Dashiel st.....	Douglas ave.....	Thirty-seventh st.....	56.70
2091	East	Ullman st.....	N. line lot 5.....	S. line lot 12.....	153.10
2092	South	Thirty-seventh st.....	Stanton av.....	Lake ave.....	86.09
2093	Both	Douglas av.....	S. Park ave.....	I. C. E. R.....	186.25
2094	Both	Twenty-eighth st.....	Stewart ave.....	Wallace st.....	58.05
2095	Both	Hermitage ave.....	W. Polk st.....	W. Harrison st.....	98.55
2096	South	W. Ohio st.....	Oakley ave.....	Western ave.....	44.55
2097	South	W. Polk st.....	Robey st.....	S. Western ave.....	122.69
2098	North	Sloan st.....	Elston ave.....	Noble st.....	64.80
2099	Both	W. Nineteenth st.....	Centre ave.....	Blue Island ave.....	375.42
2100	South	W. Nineteenth st.....	Blue Island ave.....	Wood st.....	64.80
2101	North	W. Polk st.....	Ashland ave.....	Paulina st.....	159.30
2102	South	McReynolds st.....	Ashland ave.....	Ridgeville road.....	51.30
2103	East	Loomis st.....	W. Sixteenth st.....	Blue Island ave.....	80.59
2104	East	Wood st.....	W. Harrison st.....	W. Polk st.....	184.66
2110	West	Rhodes ave.....	Douglas ave.....	Thirty-second st.....	37.80
2111	West	Prairie ave.....	Douglas ave.....	627 ft. N. of 37th st.....	44.55
2112	Both	Fifth ave.....	Monroe st.....	Taylor st.....	217.75
2113	West	Laurel st.....	Douglas ave.....	Egan ave.....	728.19
2114	North	W. Van Buren st.....	Western ave.....	Alley E. of Leavitt st.....	197.49
2115	North	Birch st.....	Kendall st.....	Robey st.....	127.58
2116	West	Robey st.....	Evergreen ave.....	Milwaukee ave.....	70.73
2117	East	Hoyne ave.....	W. Sixteenth st.....	W. Twenty-second st.....	163.69
2118	North	W. Superior st.....	Robey st.....	Hoyne ave.....	127.67
2119	East	Bauwans st.....	Ashland ave.....	W. Blackhawk st.....	46.97
2120	South	W. Adams st.....	Rockwell st.....	California ave.....	67.40
2121	West	Robey st.....	Birch st.....	W. Polk st.....	109.56
2122	East	Ridgeville road.....	W. Blackhawk st.....	North ave.....	53.46
2133	South	Twenty-sixth st.....	Stewart ave.....	Butler st.....	47.01
2134	West	Bonfield st.....	Archer ave.....	Lyman st.....	96.90
2135	North	Twenty-third st.....	Hanover st.....	Portland ave.....	61.25
2136	North	W. Jackson st.....	Rockwell st.....	California ave.....	132.56
2137	South	W. Fifteenth st.....	Wood st.....	Lincoln st.....	61.84
2138	West	Wood st.....	W. Fifteenth st.....	W. Sixteenth st.....	97.75
2139	North	Thirteenth place.....	Ashland ave.....	Wood st.....	40.14
2140	Both	Superior st.....	N. Clark st.....	N. Wells st.....	193.37
2141	Both	Superior st.....	N. Clark st.....	N. Wells st.....	387.61
2142	Both	Illinois st.....	N. Clark st.....	Kingsbury st.....	366.26
2143	Both	Larrabee st.....	North ave.....	Sophia st.....	59.50
2144	Both	Sophia st.....	Larrabee st.....	N. Clark st.....	72.37
2145	South	Cologne st.....	Deering st.....	Fuller st.....	40.77
2170	Both	Mohawk st.....	North ave.....	Sophia st.....	173.56
2171	Both	Huribut st.....	North ave.....	Sophia st.....	76.15
2172	Both	Church st.....	North ave.....	Centre st.....	89.78
2173	Both	Sedgwick st.....	North ave.....	N. Clark st.....	341.78
2174	Both	N. Wells st.....	North ave.....	N. Clark st.....	202.46
2175	Both	Menomonee st.....	Larrabee st.....	N. Wells st.....	112.37
2176	Both	N. Franklin st.....	Menomonee st.....	N. Clark st.....	107.30
2177	Both	Wisconsin st.....	Larrabee st.....	N. Clark st.....	94.32
2178	Both	Centre st.....	Larrabee st.....	Sedgwick st.....	139.74
2179	South	Grant place.....	Huribut st.....	N. Clark st.....	61.80
2180	Both	N. La Salle st.....	Chicago ave.....	N. Clark st.....	879.94
2181	Both	Lincoln ave.....	N. Wells st.....	Huribut st.....	311.88
2182	East	N. Clark st.....	Division st.....	North ave.....	339.58
2183	Both	Vine st.....	North ave.....	Willow st.....	73.79
2184	Both	Goethe st.....	N. State st.....	Stone st.....	208.48
2185	Both	Scott st.....	N. State st.....	Stone st.....	260.81
2186	Both	Hammond st.....	Menomonee st.....	Wisconsin st.....	54.44
2187	Both	Grant st.....	N. La Salle st.....	N. Clark st.....	91.96
2188	Both	Burton place.....	N. Clark st.....	N. Dearborn st.....	70.21
2189	Both	Wieland st.....	Schiller st.....	North ave.....	118.74
2190	Both	Illinois st.....	N. Clark st.....	N. State st.....	120.83
			Amount carried forward.....		14,119.89

STATEMENT OF ASSESSMENTS FOR THE CONSTRUCTION OF
SIDEWALKS—CONTINUED.

No. of Warrant.	Side of Street.	Name of Street.	From	To	Amount of Assess'm'ts
			Amount brought forward.....		14,119.89
2191	Both	Indiana st.....	Pine st.....	N. Dearborn st.....	308.00
2192	Both	Ohio st.....	N. Clark st.....	Kingsbury st.....	617.55
2193	Both	Ontario st.....	N. Clark st.....	Kingsbury st.....	815.34
2194	Both	Erie st.....	N. Clark st.....	Erie st. bridge.....	292.69
2195	Both	Huron st.....	N. Clark st.....	Kingsbury st.....	453.90
2196	Both	Rush st.....	Chicago ave.....	N. State st.....	223.68
2197	Both	Elm st.....	Larrabee st.....	Lake Michigan.....	1,213.73
2198	Both	Delaware place.....	N. Dearborn st.....	Pine st.....	242.83
2199	Both	Chestnut st.....	N. La Salle.....	Pine st.....	81.65
2200	South	Chestnut st.....	N. La Salle st.....	Western terminus.....	76.00
2201	Both	Oak st.....	Larrabee st.....	N. State st.....	347.86
2202	East	N. Clark st.....	North ave.....	Fullerton ave.....	81.85
2203	West	N. State st.....	Cedar st.....	Schiller st.....	236.98
2204	Both	Illinois st.....	N. State st.....	Pine st.....	360.00
2209	Both	Vedder st.....	Larrabee st.....	N. Halsted st.....	115.69
2210	North	Chicago ave.....	N. Franklin st.....	Pine st.....	166.52
2211	Both	Michigan st.....	Pine st.....	Cass st.....	165.00
2212	Both	Kinzie st.....	N. Clark st.....	Cass st.....	226.76
2213	Both	Cass st.....	N. Water st.....	Rush st.....	169.27
2214	Both	Pine st.....	N. Water st.....	Chestnut st.....	333.73
2215	Both	N. Dearborn st.....	N. Water st.....	Illinois st.....	218.96
2216	Both	Bremer st.....	Chicago ave.....	Division st.....	57.74
2217	Both	Wesson st.....	Chicago ave.....	Division st.....	113.70
2218	Both	Cedar st.....	N. State st.....	Lake Michigan.....	276.04
2219	Both	Oakwood st.....	N. State st.....	Lake Michigan.....	366.60
2220	Both	Maple st.....	N. La Salle.....	E. terminus.....	96.60
2221	Both	Walton place.....	N. Dearborn st.....	Pine st.....	205.62
2222	Both	E. Pearson st.....	Lake Michigan st.....	W. terminus.....	294.18
2223	Both	Pearson st.....	E. terminus.....	W. terminus.....	463.35
2224	Both	Hobble st.....	Larrabee st.....	Sedgwick st.....	118.93
2225	Both	W. White st.....	N. La Salle st.....	W. terminus.....	292.97
2226	Both	Whitney st.....	E. terminus.....	W. terminus.....	184.34
2227	Both	Wendell st.....	Sedgwick st.....	E. terminus.....	377.03
2228	Both	Hills st.....	Sedgwick st.....	E. terminus.....	179.10
2229	Both	Sixteenth st.....	Arnold st.....	Wentworth ave.....	72.07
2230	Both	N. La Salle st.....	N. Water st.....	Chicago ave.....	660.56
2231	Both	N. Market.....	N. Water.....	Division st.....	234.90
2232	Both	Sedgwick st.....	Erie st.....	Division st.....	385.78
2233	Both	Townsend st.....	Erie st.....	Division st.....	707.30
2234	Both	Kingsbury st.....	Erie st.....	Division st.....	54.00
2235	Both	W. Harrison st.....	Clinton st.....	Ellsworth st.....	139.37
2236	Both	Sebor st.....	Jefferson st.....	Clinton st.....	58.03
2237	Both	Mather st.....	Jefferson st.....	Ellsworth st.....	276.04
2238	Both	W. Polk st.....	Jefferson st.....	Ellsworth st.....	56.00
2239	Both	Forquer st.....	Jefferson st.....	Beach st.....	292.11
2240	East	Clinton st.....	W. Van Buren st.....	Forquer st.....	178.63
2241	East	Jefferson st.....	W. Jackson st.....	W. Taylor st.....	125.80
2242	Both	Sebor st.....	Canal st.....	Ellsworth st.....	260.81
2243	East	Ashland avenue.....	Cornelia st.....	W. Division st.....	63.25
2244	West	Third avenue.....	Jackson st.....	Harrison st.....	267.50
2245	Both	Fourth ave.....	Jackson st.....	Harrison st.....	944.56
2246	Both	Sherman st.....	Jackson st.....	Harrison st.....	91.50
2247	Both	Franklin st.....	Adams st.....	Van Buren st.....	529.18
2248	Both	Jackson st.....	Clark st.....	Market st.....	282.39
2249	North	W. Nineteenth st.....	Hoyne ave.....	Western ave.....	81.00
2250	East	Western ave.....	Milwaukee ave.....	Fullerton ave.....	361.00
2251	South	Hastings st.....	Wood st.....	Ashland ave.....	106.56
2252	Both	Ewing st.....	Jefferson st.....	Beach st.....	172.80
2253	North	Dekoven st.....	Jefferson st.....	Clinton st.....	83.88
2254	South	W. Taylor st.....	Jefferson st.....	Clinton st.....	63.00
2255	Both	Jones st.....	W. Thirty-third st.....	Archer ave.....	108.10
2256	West	Hoyne ave.....	Evergreen ave.....	Ewing pl.....	87.12
2257	North	Fowler st.....	Robey st.....	Hoyne ave.....	37.89
2258	Both	Julian st.....	Ridgeville road.....	Wood st.....	168.93
2259	Both	Edgar st.....	W. Clybourn pla.....	Bloomington road.....	79.56
2260	East	Wood st.....	Wabansia ave.....	Milwaukee ave.....	269.14
2261	South	Thirty-third ct.....	Halsted st.....	Laurel st.....	221.48
2262	Both	Charles pl.....	Fifth ave.....	Franklin st.....	119.80
2263	Both	Congress st.....	Fifth ave.....	Market st.....	117.57
2264	West	N. Robey st.....	Peterson st.....	Armitage road.....	77.76
2265	Both	Dean st.....	Ridgeville road.....	Brigham st.....	241.99
Amount carried forward					\$31,841.42

STATEMENT OF ASSESSMENTS FOR THE CONSTRUCTION OF
SIDEWALKS—CONTINUED.

No. War- rant.	Side of Street.	Name of Street.	From	To	Amount of Assessm'ts
			Amount brought forward.....		\$31,841.43
2266	West	Oakley ave.....	W. Ohio st.....	W. Kinzie st.....	78.12
2267	Both	Hickory st.....	Main st.....	Cologne st.....	55.80
2268	West	N. Clark st.....	Kinzie st.....	Clark st bridge.....	422.30
2269	South	Thirty-third st.....	Halsted st.....	Laurel st.....	194.40
2293	Both	Kendall st.....	W. Polk st.....	W. Taylor st.....	362.76
2294	West	Ogden ave.....	Robey st.....	W. Polk st.....	69.12
2295	Both	Ogden av.....	W. Polk st.....	W. Twelfth st.....	197.24
2296	South	West Jackson st.....	Sacramento st.....	California ave.....	74.04
2297	Both	Pine st.....	Chestnut st.....	Walton pl.....	267.05
2298	Both	Michigan st.....	Cass st.....	Kingsbury st.....	190.20
2299	Both	Indiana st.....	N. Dearborn st.....	Kingsbury st.....	385.48
2300	Both	Michigan ave.....	Van Buren st.....	River st.....	258.52
2301	Both	Oakley ave.....	W. Harrison st.....	W. Twelfth st.....	501.52
2302	South	West Polk st.....	Ogden ave.....	Western ave.....	240.79
2303	East	Western ave.....	W. Van Buren st.....	W. Polk st.....	208.98
2304	North	W. Polk st.....	Paulina st.....	Western ave.....	232.60
2305	South	Wabansia ave.....	Eaton ave.....	Ridgeville road.....	259.50
2306	Both	Hoynes ave.....	W. Indiana st.....	W. Chicago ave.....	260.02
2307	Both	Van Horn st.....	Robey st.....	Hoynes ave.....	77.76
2308	Both	W. Twenty-first st.....	Leavitt st.....	Western ave.....	51.84
2309	South	Chicago ave.....	Pine st.....	E. terminus.....	235.00
2310	West	Paulina st.....	West Eighteenth st.....	W. Nineteenth st.....	90.00
2311	West	Ashland ave.....	West Nineteenth st.....	W. Twenty-second st.....	47.92
2312	Both	Commercial st.....	Wabansia ave.....	Bloomingsdale road.....	164.79
2313	South	W. Indiana st.....	Jefferson st.....	Desplaines st.....	138.00
2314	Both	Crawford st.....	N. terminus.....	S. terminus.....	87.84
2315	East	Wentworth ave.....	Twenty-second st.....	Twenty-fifth st.....	152.91
2316	East	Throop st.....	W. Twenty-second st.....	400 feet south.....	149.61
2317	North	W. Van Buren st.....	Halsted st.....	Green st.....	117.50
2323	North	W. Division st.....	Lincoln st.....	Rockwall st.....	413.06
2364	East	N. Dearborn st.....	Illinois st.....	North ave.....	331.94
2365	Both	Twenty-eighth st.....	Halsted st.....	Wallace st.....	90.00
2366	North	Spruce st.....	Loomis st.....	Lafin st.....	171.95
2367	Both	W. Madison st.....	Throop st.....	California ave.....	612.74
2368	Both	Mautene ct.....	Milwaukee ave.....	S. W. terminus.....	44.64
Total.....					\$39,077.36

SUMMARY.

Total assessments for wooden block
pavement, including curbing and
filling:

North Division.....	\$ 55,922.32	
South Division.....	196,980.71	
West Division.....	218,117.92	
		\$471,020.95

Total assessments for miscellaneous
street and alley improvements:

North Division.....	30,286.71	
South Division.....	23,598.13	
West Division.....	58,587.79	
		112,472.63
Amount carried forward		\$583,493.58

Amount brought forward		\$583,483.58
Total assessments for erection of lamp posts:		
North Division.....179 posts	\$ 6,357.21	
South Division..... 325 "	11,651.09	
West Division..... 601 "	21,176.41	
	<u>1,105</u>	39,184.71
Total assessments for construction of private drains:		
North Division.....	8,351.90	
South Division.....	16,845.59	
West Division.....	32,653.20	
	<u></u>	57,850.69
Total assessments for laying of water service pipes:		
North Division.....	2,165.30	
South Division.....	14,204.04	
West Division.....	6,239.34	
	<u></u>	22,608.68
Total assessments for laying of gas service pipes:		
North Division.....		
South Division		
West Division.....	7,245.25	
	<u></u>	7,245.25
Total assessments for construction of sidewalks:		
North Division.....	22,797.20	
South Division.....	5,445.01	
West Division.....	10,835.15	
	<u></u>	39,077.36
Total amount of assessments for the North, South and West Divisions...		\$749,460.27

NORTH DIVISION.

Total amount of assessments for street improvements.....	125,880.64
Total amount payable out of appropriation fund on account of same...	36,033.39
Amount carried forward	<u>\$161,914.03</u>

Amount brought forward.....	\$161,914.03	
Total estimated cost of street improvements in North Division.....		\$161,914.03
SOUTH DIVISION.		
Total amount of assessments for street improvements.....	268,724.57	
Total amount payable out of appropriation fund on account of same...	43,313.25	
Total estimated cost of street improvements in South Division.....		312,037.82
WEST DIVISION.		
Total amount of assessments for street improvements.....	354,855.06	
Total amount payable out of appropriation fund on account of same...	58,309.02	
Total estimated cost of street improvements in West Division.....		413,164.08
Total estimated cost of street improvements in the North, South and West Divisions.....		887,115.93
To be paid from appropriation fund for street improvements in the		
North Division.....	36,033.39	
South Division.....	43,313.25	
West Division.....	58,309.02	
Total.....		137,655.66
Total number of lamp posts provided for by assessments.		
NORTH DIVISION.		
From April 1, 1873, to April 1, 1874.	170	
Posts erected prior to April 1, 1873...	1,468	1,638
SOUTH DIVISION.		
From April 1, 1873, to April 1, 1874.	317	
Posts erected prior to April 1, 1873...	1,972	2,289
Amount carried forward		\$39.27

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Amount brought forward..... \$39.27

WEST DIVISION.

From April 1, 1873, to April 1, 1874.	\$ 618	
Posts erected prior to April 1, 1873...	3,143	3,761
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Total number of lamp posts in the city provided for by special assessment..		7,688

In addition to the above, there are bridge and viaduct lamp posts, not provided for by special assessment, which makes the total number of lamp posts in the city 7,808.

The following improvements have been made during the past year by private contract :

PAVED WITH WOODEN BLOCKS.—NORTH DIVISION.

Name of Street.	From	To	No. lineal ft.
Kinzie st.....	Wells st.....	Rush st.....	2,287
N. La Salle st.....	Michigan st.....	Chicago ave.....	2,258
		Total.....	4,545

PAVED WITH WOODEN BLOCKS.—SOUTH DIVISION.

Name of Street.	From	To	No. lineal ft.
Wabash ave.....	S. Water st.....	Congress st.....	4,050
Wabash ave.....	Twenty-ninth st.....	Thirty-fifth st.....	3,919
Thirty-first st.....	South Park ave.....	State st.....	2,587
Vernon ave.....	Twenty-ninth st.....	Thirtieth st.....	808
Twenty-ninth st.....	Cottage Grove ave.....	Calumet ave.....	1,087
Twenty-fifth st.....	State st.....	Wabash ave.....	888
Twenty-third st.....	Michigan ave.....	Indiana ave.....	841
Prairie ave.....	Thirtieth st.....	Thirty-first st.....	454
Harrison st.....	State st.....	Wabash ave.....	861
Monroe st.....	State st.....	Wabash ave.....	860
Washington st.....	State st.....	Michigan ave.....	710
S. Water st.....	Clark st.....	Michigan ave.....	1,534
Randolph st.....	Clark st.....	Michigan ave.....	1,534
Lake st.....	Wells st.....	Michigan ave.....	1,891
Clark st.....	S. Water st.....	Harrison st.....	3,915
State st.....	Randolph st.....	Jackson st.....	2,385
River st.....	Dock st.....	S. Water st.....	80
Dearborn st.....	S. Water st.....	Madison st.....	1,529
Madison st.....	State st.....	Wabash ave.....	841
		Total.....	28,269

PAVED WITH WOODEN BLOCKS.—WEST DIVISION.

Name of Street.	From	To	No. lineal ft.
Milwaukee ave.....	Division st.....	North ave.....	4,047
W. Lake st.....	Canal st.....	Halsted st.....	2,066
		Total.....	6,113

CINDERING.—WEST DIVISION.

Name of Street.	From	To	No. lineal ft.
*Elston ave.....	Milwaukee ave.....	North ave.....	5,116
Grand ave.....	Rockwell st.....	Crawford ave.....	10,122
		Total.....	15,238

* Partly done under contract with the city.

SUMMARY.

This in addition to improvements previously reported gives the following:

RECAPITULATION.

415,534 lineal feet wooden block pavement, equal to	788624
44,585 " cindering, equal to.....	82245
44,953 " graveling, equal to.....	82718
32,552 " Macadamizing, equal to.....	6872
* 5,998 " stone pavement, equal to.....	1718
Total number of miles improved in the city.....	1025062

These improvements are distributed in the three divisions of the city as follows:

NORTH DIVISION.

104,405 lineal feet wooden block pavement, equal to	194085
5,044 " cindering, equal to.....	5044
2,217 " graveling, equal to.....	2217
6,358 " Macadamizing, equal to.....	11078
908 " stone pavement, equal to.....	908
Total number of miles improved in North Division...	222772

SOUTH DIVISION.

136,744 lineal feet wooden block pavement, equal to	254744
28,816 " graveling, equal to.....	52416
10,291 " Macadamizing, equal to.....	15011
5,090 " stone pavement, equal to.....	5090
Total number of miles improved in South Division...	341421

WEST DIVISION.

174,385 lineal feet wooden block pavement, equal to	33145
39,541 " cindering, equal to.....	72581
13,920 " graveling, equal to.....	23360
15,903 " Macadamizing, equal to.....	363
Total number of miles improved in West Division...	46869

* The amount of stone pavement is less than at the last report, from the fact that on some streets, the stone pavement has been taken up, and wooden block pavement laid instead.

As a matter of reference I reproduce the amount of special assessments levied during the past twelve years.

The following list shows the total amount of assessments made in each year by the Board of Public Works, since it was created in 1861 :

For the year ending April 1, 1862.....	\$ 42,635.49
For the year ending April 1, 1863	46,493.67
For the year ending April 1, 1864	389,169.31
For the year ending April 1, 1865	103,576.35
For the year ending April 1, 1866	802,574.56
For the year ending April 1, 1867	317,206.18
For the year ending April 1, 1868	1,354,436.48
For the year ending April 1, 1869	2,395,683.03
For the year ending April 1, 1870	2,836,852.48
For the year ending April 1, 1871	2,359,835.89
For the year ending April 1, 1872	62,222.25
For the year ending April 1, 1873 .....	.....
For the year ending April 1, 1874	749,460.27

Total for thirteen years,....\$11,460,145.96

Respectfully submitted,

H. J. JONES,

In charge Special Assessments.

FINANCIAL STATEMENT.

TO THE BOARD OF PUBLIC WORKS:

GENTLEMEN:—Herewith I respectfully present my report of the receipts and expenditures by the Board of Public Works, from April 1st, 1873, to March 31st, 1874, inclusive.

TRIAL BALANCE LEDGER, BOARD OF PUBLIC WORKS, MARCH 31st, 1874.

	Dr.	Cr.
Water Works	\$ 4,518,566.99	
Water Works income.....		\$5,380,352.99
Water Fund in hands of City Treas..	697,795.47	
Water Loan Bonds, 6 $\frac{3}{4}$ cent.....		1,016,000.00
Water Loan Bonds, 7 $\frac{3}{4}$ cent.....		3,565,000.00
Water Loan Bonds, canceled.....		239,000.00
Water Loan interest.....	2,148,233.58	
Water Works repairs and expense....	2,327,275.15	
Discount on Water Loan Bonds	55,529.46	
Duncan, Sherman & Co.....	3,015.00	
Water Works' coal account		6,966.88
Water Works' stock.....	29,083.00	
New lake tunnel.....	262,682.62	
Water Works, new crib	27,701.14	
New pumping works.....	63,000.00	
Land tunnel	203,870.89	
Water service cocks		2,610.42
Certificates of indebtedness.....		127,323.00
E. M. Johnson	500.00	
Water tax fund in hands of City Treas.	392,019.17	
A. B. Miner and A. C. Reed.....		4,000.00
F. E. Canda & Co.....		1,342.66
Amount carried forward.	\$10,729,272.47	\$10,342,595.96

	Dr.	Cr.
Amount brought forward.....	\$10,729,272.47	\$10,342,595.96
Ogden, Sheldon & Co.....		6,797.64
Water pipe account.....	23,962.74	
T. D. Louther.....		983.15
C. H. McCormick & Bro.....		5,210.49
S. J. Rawson		1,188.76
Water Works	1,127,995.82	
Certificates of indebtedness.....		399,780.97
General taxes, water.....		1,124,674.06
Sewerage fund in hands of City Treas.	141,550.80	
Sewerage sinking fund.....		66,341.55
Sewerage loan interest.....	92,657.84	
American Exchange National Bank..	3,152.50	
Sewerage sinking fund in hands of City Treas.....	53,088.16	
Certificates of indebtedness.....		221,915.85
Sewerage stock account.....	2,533.55	
House drains.....	2,401.11	
Galena & Chicago Union R. R. Co...		382.55
Chicago, Bur. & Quincy R. R. Co...		6,744.01
Sewerage tax fund in hands of City Treas.....	738,676.90	
Sewers, North Division.....	818,231.27	
Sewers, South Division	1,111,209.38	
Sewers, West Division.....	1,719,821.36	
Sewerage Loan Bonds, 6 $\frac{3}{8}$ cent.....		87,000.00
Sewerage Loan Bonds, 7 $\frac{3}{8}$ cent.....		2,550,000.00
Sewerage Loan Bonds, 7 $\frac{3}{8}$ cent., canceled		363,000.00
Certificates of indebtedness.....		402,033.90
Sewerage covers.....	5,945.24	
Sewerage brick.....	14,189.91	
Sewerage pipe.....	24,920.03	
General taxes, sewerage		1,115,878.82
S. Lynd, Treas. Sewerage Commis- sioners	109,245.48	
Dennis Coughlin.....	1,561.51	
Amount carried forward.....	\$16,720,416.07	\$16,694,527.71

THE BOARD OF PUBLIC WORKS.

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	Dr.	Cr.
Amount brought forward.....	\$16,720,416.07	\$16,694,527.71
Seipp & Lehmann.....		1,526.06
Rev. David Swing.....		120.00
John Gale.....		116.00
Barbara McMahon.....		200.00
B. F. Findley.....		500.00
A. H. Pickering.....		200.00
R. W. Dunham.....		100.00
Hull & Liddell.....		300.00
John F. Newton.....		150.00
Wm. Cleaver.....		50.00
John B. Owen.....		50.00
E. H. Thaxter.....		50.00
J. W. Horton.....		200.00
S. Hopkins.....		100.00
W. H. Bradley.....		750.00
W. Marks.....		50.00
B. Fowler.....		150.00
L. P. Odowne.....		50.00
J. C. Haines.....		50.00
Thomas Evans.....		50.00
A. W. Morris.....		100.00
Mrs. J. M. Day.....		100.00
Robert Porter.....		100.00
J. L. James.....		200.00
De Golyer & Boswell.....		1,000.00
J. G. Savage.....		50.00
Alex. Cook.....		67.00
M. W. Fuller.....		250.00
Thomas Brown.....		107.28
A. D. Hayward.....		375.49
E. A. Beach.....		160.93
A. C. Bartlett.....		407.67
H. H. Belding.....		407.67
Spencer Warner.....		321.84
S. S. Stillwell.....		214.56
W. B. Jacobs.....		214.56

Amount carried forward.....\$16,720,416.07 \$16,703,366.77

	Dr.	Cr.
Amount brought forward.....	\$16,720,416.07	\$16,703,866.77
W. J. Davis..		1,000.00
C. P. Buckingham.....		425.00
L. Proudfoot.....		452.50
J. B. French.....		267.75
J. M. Oliver.....		62.95
C. J. Furst.....		62.95
Jacob Furst.....		116.50
Dewitt Campbell.....		80.75
Henry C. Hoyt.....		111.85
A. Plamondon		74.50
R. J. Hughes.....		2,059.67
E. McGrath.....		192.51
Lyons & Scanlon.....		2,379.69
John Duffy.....		181.98
Chas. Overocker.....		253.40
Jas. Kincade.....		951.45
J. Stanley.....		86.25
M. Mulaney		4,164.03
B. Langan.....		1,291.14
N. Eisendrath.....		534.00
Collins & Burgie.....		123.00
Schneider & Company		400.00
A. M. Furrier		240.00
J. A. Martin.....		110.00
A. A. Dewey.....		816.50
R. A. B. Mills		165.00
F. C. Boyd		70.00
Geo. Hall.....		48.17
C. P. Kidd		327.76
Appropriation fund in hands of City Treas.....	727,540.22	
South Division.....		2,539.63
West Division.....		3,363.94
Special assessment expense.....		493.95
City office expense.....		2,459.44
Public buildings.....	4,047.25	
Amount carried forward.....	\$17,452,003.54	\$16,729,273.03

	Dr.	Cr.
Amount brought forward.....	\$17,452,003.54	\$16,729,273.03
Public library.....	2,500.00	
Certificates of indebtedness.....		320,102.17
Sidewalks, North Division.....		6,287.88
Sidewalks, South Division.....		6,913.34
Sidewalks, West Division.....		4,410.37
Lincoln park.....		243.49
Union square.....		1,000.00
Washington park.....		1,885.25
Lake park.....		7,386.07
Ellis park.....		434.58
Dearborn park.....		8,000.00
Union park.....		336.47
Jefferson park.....		1,562.03
Vernon park.....		187.20
Wicker park.....		1,190.93
Washington street tunnel.....		3,834.32
La Salle street tunnel.....		1,117.02
Confiscated property.....		356.08
Street signs.....		2,585.17
Street lamps.....		2,539.39
Public hydrants.....		33.86
F. J. Reed, Cashier.....	308.12	
Warrant No. 480.....		308.12
City Proportional Expense.....		1,930.08
Pounds.....		22.16
Clark street viaduct.....		997.57
Public Benefits.....		4,666.82
Chicago Harbor.....		644.94
Land damages at Polk street bridge.....		1,770.00
Land damages at 12th street bridge.....		21,600.00
Land damages at 18th street bridge.....		8,900.00
Land damages at 22nd street bridge.....	1,498.14	
Land damages at Adams st. bridge.....		2,939.00
Land damages at Rush street bridge.....		1,652.34
Land damages at N. Halsted bridge.....		6,500.00
Bridge Department.....	2,717.91	
Amount carried forward.....	\$17,459,027.71	\$17,151,609.68

	Dr.	Cr.
Amount brought forward.....	\$17,459,027.71	\$17,151,609.68
Halsted st. bridge, canal.....		30,000.00
Lake street bridge.....	8,542.12	
Harrison street bridge		37,340.00
Thirty-fifth street bridge.....		1,670.00
North avenue bridge		35,000.00
Clybourne Place bridge.....	13,367.22	
City Hall Fund plans.....		31.32
Twelfth street viaduct	9,080.88	
North Halsted st. viaduct.....		39,963.66
Cleaning North Branch.....		199,076.86
Small pox hospital.....	6,673.59	
Bathing houses.....		2,000.00
River Imp. fund, due City Treasurer		7,813.38
American Exchange National Bank..	2,310.00	
River Improvement, loan interest....		28,178.53
River Improvement, sinking fund....		48,827.08
River Improvement bonds 7 $\frac{3}{8}$ cent		2,621,000.00
River Improvement sinking fund in hands of Treasurer.....	48,827.08	
River Improvement bonds cancelled..		379,000.00
River Improvement certificates of ind.		272,976.98
Cost of deepening Ill. and Michigan Canal.....	3,306,658.89	
La Salle street tunnel fund due City Treasurer		66.76
La Salle street tunnel fund certifi- cates of indebtedness.....	1,043.03	
La Salle street tunnel fund bonds...		565,228.52
Cost of La Salle street tunnel.....	564,252.25	
City Hall fund due City Treasurer...		738.16
City Hall bonds		457,000.00
City Hall certificates of indebtedness	123.67	
Cost of City Hall	457,614.49	
City Bridewell fund in hands of City Treasurer.....	25,990.80	
City Bridewell bonds.....		385,000.00
Cost of City Bridewell.....	359,009.20	
	<hr/>	<hr/>
	\$22,262,520.93	\$22,262,520.93

WATER FUND.

STATEMENT of the receipts by the Board of Public Works from April 1st, 1873, to March 31st, 1874, inclusive, and detailed statement of the expenditures during the same time.

RECEIPTS.

Amount of appropriation by council....	\$400,000.00	
Received for Water Tax collected.....	708,804.32	
Received for temporary loans.....	572,529.40	
Received for interest from Canal red. fund.....	155,599.05	
Received for tapping pipes.....	17,651.75	
Received for letting on water.....	2,107.15	
Received for labor and material.....	15,304.83	
Received for brick sold.....	2,864.00	
Received from Cook Co., rent ground	5,430.00	
Received from voucher canceled.....	397.05	
Received for setting meters.....	185.00	
Received for water service pipe.....	21.61	
Total Receipts.....		\$1,880,894.16

EXPENDITURES.

ADDITIONS TO WATER WORKS.

DISTRIBUTING PIPES AND
SUPPLY MAINS LAID.

	Cash Payments.	True Cost.
Cast iron pipes, 4, 6, 8, 12, 16, and 36 inch.....		\$364,919.40
Labor laying pipe	75,664.69	
Lead used.....	21,629.24	
Special castings.....	28,947.20	
Trenching and backfilling.....	21,504.63	
Hydrants and stop-cocks made at shops.....	32,949.19	
Lumber	2,071.22	
Brick	4,493.90	
Amount carried forward.....		\$552,179.47

	Cash Payments.	True Cost.
Amount brought forward...	\$552,179.47	
Cement.....	2,941.81	
Plumbing.....	1,431.94	
Gasket.....	641.40	
Sewer pipe.....	888.68	
Hardware.....	464.67	
Horse keeping.....	642.56	
Hauling pipe.....	6,891.18	
Rush street tunnel.....	7,027.33	
Salt.....	12.75	
Rent.....	289.55	
Sawdust.....	90.00	
Oil and candles.....	80.16	
Sand.....	192.50	
Shoeing horses.....	68.95	
One horse.....	150.00	
Repairing tools.....	189.48	
Lanterns and repairs.....	48.10	
Harness and repairs.....	65.60	
Advertising.....	258.20	
Packing.....	46.63	
Use of horse.....	145.50	
Water gauge.....	45.00	
Hose.....	72.00	
Nails.....	65.25	
Powder.....	329.85	
ADD—		
	<hr/>	\$575,208.56
Laying pipe, for which money was advanced.....	19,683.18	
DEDUCT—		
Voucher for freight, canceled\$	397.05	
Amount received for labor and material	15,207.39	
	<hr/>	
	4,078.74	\$579,287.30
NEW LAKE TUNNEL.		
Paid Steel & McMahon, con- tractors.....	168,539.02	
	<hr/>	
Amount carried forward.....	\$575,208.56	\$579,287.30

		Cash Payments.	True Cost.
Amount brought forward...		\$575,208.56	\$579,287.80
Asst. Engineer.....	\$3,240.00		
Inspectors.....	9,147.38		
Paid for diving to examine shaft	2,084.00		
Bedding	14.00		
Tape-lines.....	33.50		
Hardware.....	152.64		
Candles.....	3.60		
Survey	10.00		
Oil.....	9.00		
Use of tugs.....	207.00		
Rockets.....	7.00		
Tracing cloth.....	26.00		
Levels.....	14.20		
DEDUCT—		183,487.34	
Amount received for brick sold	2,864.00		180,623.34

NEW ENGINE.

Labor at shops in 1873.....	1,631.56
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LAND TUNNEL.

Paid Cox Bros, contractors.....	187,635.12		
Salary of engineers and in-			
spectors.....	15,383.99		
Lanterns.....	52.40		
Stoves.....	46.80		
Iron work.....	59.55		
Rope.....	11.78		
Coal.....	69.00		
Augers	18.00		
Boring rods.....	68.75	203,345.39	203,345.39

WATER WORKS CRIB.

Paid Steel & McMahon, con-			
tractors.....	25,791.81		
Inspectors	567.00		
Use of tug.....	35.00		
Rope.....	18.50		
Pipe	9.00	26,421.31	26,421.31
Total addition to water works..		\$988,462.60	\$991,308.90

WORKING EXPENSES AND REPAIRS.

PUMPING WORKS AND SHOPS.

	Cash Payments.	True Cost
For 14,640 ¹⁵²⁰ / ₂₀₀₀ tons coal	\$114,206.62	
Salary of engineer and assistants.....	8,220.00	
✓ Labor	36,181.72	
Castings	17,386.94	
Constructing drive and walks...	1,886.73	
Iron and steel.....	1,724.77	
Bolts and washers.....	1,876.61	
Gas.....	1,654.00	
One lathe.....	1,830.00	
Painting engines.....	1,135.32	
Waste and packing.....	374.42	
Hardware.....	186.36	
Lumber.....	419.03	
Lead.....	360.73	
Trees.....	473.00	
Oil.....	783.15	
Asphalt pavement.....	241.08	
Shoeing horses.....	121.70	
Engraving for annual report...	595.00	
Horse feed.....	742.74	
Filling.....	315.90	
Plumbing and gas fitting.....	327.67	
Gasket	105.19	
Sole leather.....	172.86	
Repairing boiler.....	246.69	
Stationery.....	33.38	
Misc. items.....	91.50	
Canvas	76.86	
Steam gauge.....	50.00	

Amount carried forward.....\$191,819.97

	Cash Payments.	True Cost.
Amount brought forward....	\$191,819.97	
Cement and lime.....	66.75	
Brooms and matches.....	20.80	
Mercury	14.50	
Bedding	81.79	
Belting.....	12.92	
Glass	17.63	
Advertising.....	65.41	
Harness and repairs.	72.45	
Sprinkling	72.00	
Files	19.73	
Ice.	36.00	
Brick.....	74.00	
Hose.....	49.00	
ADD—		\$192,422.95
Coal used previous-		
ly paid for.....	\$1,938.16	
Coal used not yet		
paid for.....	11,165.04	13,103.20
DEDUCT—		
Amount received		
for making hy-		
drants and stop		
cocks.....	33,333.35	
Labor and coal		
charged, coal ac-		
count	2,680.91	
Amount charged,		
repairs for dam-		
age by fire.....	6,473.75	
Amount charged,		
new engine for		
labor.....	1,631.56	
Expense of keep-		
ing horses.....	988.24	
Labor on annual		
report	362.13	
Am't car'd for'd	\$45,469.94	\$192,422.95

		Cash Payments.	True Cost.
Am't bro't for'd	\$45,469.94	\$192,422.95	
Machinery at shops	1,827.19		
Repairs of hy-			
drants and tools	738.75	48,035.88	
		<u>\$34,932.68</u>	\$157,490.27

OFFICE EXPENSE AND SALARIES.

One-third salary of commis-			
sioners	\$3,999.96		
One-third salary of secretary..	1,000.00		
One-third salary of superin-			
tendent.....	1,000.00		
One-third salary of city engi-			
neer.....	1,500.00		
One-third salary of book-keep-			
ers and clerks.....	6,875.00		
Salary of collectors.....	8,400.00		
Salary of assessor and ass'ts...	8,100.00		
Salary of draughtsman....	1,300.00		
Salary of engineer's clerks... .	1,050.00		
Salary of office clerks.....	2,445.72		
Printing	1,799.66		
Stationery.....	917.50		
Misc. cash items.....	239.85		
Car fares.....	276.66		
Plumbing.....	51.33		
Advertising.....	122.06		
Hardware.....	5.25		
Subscription to papers.....	36.66		
Brooms and pails.....	44.16		
Photographing for ann'l report	75.00		
Traveling expenses.....	41.10		
Engraving	7.66	38,787.57	
ADD—			
Labor on annual report.....	362.13		
Amount carried forward.....		<u>\$231,210.52</u>	\$157,490.27

	Cash Payments	True Cost.
Amount brought forward...	\$231,210.52	\$157,490.27
DEDUCT—		
Amount received for labor.....	21.61	
	<u>\$340.52</u>	<u>\$39,128.09</u>
REPAIRS OF PIPE HYDRANTS, STOP- COCKS AND MISCELLANEOUS OPE- RATING EXPENSES.		
Amount of income transferred to extension.....	\$134,025.06	
Labor	37,309.85	
Castings	7,809.87	
Plumbing	481.68	
Lumber	796.44	
Advertising.....	234.95	
Salt	45.80	
Sawdust	185.00	
Dredging basin	2,172.50	
Hardware.....	330.32	
Filling dock.....	422.40	
Brass work.....	32.75	
Steam boiler.....	298.24	
Keeping horse.....	353.61	
Lead.....	66.70	
Lanterns, reps	32.50	
Masonry work	2,935.43	
Painting.....	1,548.12	
Tile floor water works.....	9,033.86	
Cement.....	162.97	
Barn rent.....	24.00	
Repairing wagon.....	98.15	
Frescoing water works	545.00	
Plastering water works	1,099.80	
Skylight, water works.....	573.40	
Curbing street, water works ...	862.40	
Repairing dock Rush st. main.	400.00	
Oil.....	13.50	201,893.80
Amount carried forward.....	<u>\$433,104.32</u>	<u>\$196,618.36</u>

	Cash Payments.		True Cost.	
Amount brought forward...	\$433,104.32		\$196,618.36	
ADD—				
Repairs to buildings damaged by fire..	\$6,473.75			
Repairs to hydrants and stop-cocks....	462.13			
Labor at shops.....	100.77	\$7,036.65		
DEDUCT—				
Amount received for ground rent.....	5,430.00			
Amount received for letting on water...	2,204.59	7,634.59		
		<hr/>		
	597.94		201,295.86	
IRON ROOF WATER WORKS.				
Paid Philadelphia Architectu- ral Iron Works.....		8,796.76	8,796.76	
WATER WORKS SHOPS.				
New machinery put in use.....			2,771.99	
LAKE TUNNEL CRIB.				
Labor	352.00			
Oil	108.88			
Use of tug.....	121.00			
Ice scoop and basket.....	48.00			
		<hr/>	629.88	629.88
WATER METERS.				
Castings.....	4,487.34			
Pay roll.....	6,699.31			
New meters put in use	15,663.50			
Freight on meters.....	542.86			
Sawdust.....	217.70			
Plumbing.....	77.82			
Lumber.....	436.57			
Expense of keeping horse.....	292.25			
Hardware.....	278.47			
Meter counters.....	248.50			
		<hr/>		
Amount carried forward.....	\$28,944.32	\$442,530.96	\$410,112.85	

		Cash Payments.	True Cost.
Amount brought forward...	\$28,944.32	\$442,530.96	\$410,112.85
Badges.....	12.00		
Bolts.....	101.48		
Advertising.....	53.55		
Brooms and matches.....	11.30		
Rope.....	13.97		
Candles.....	38.70		
Packing.....	145.65	29,320.97	
ADD—			
Labor at shop in 1873.....	8.32		
DEDUCT—			
Amount received for setting meters.....	185.00		
	<u>176.68</u>		<u>29,144.29</u>
Total operating expenses.....		\$471,851.93	\$439,257.14

WATER LOAN INTEREST.

		Cash Payments.	True Cost.
Interest on water bonds, July, 1873.....	\$148,695.81		
Interest on water bonds, Jan., 1874.....	149,402.57		
Coupons paid by City Treas...	13,155.00	\$311,253.38	
ADD—			
Amount transferred from De- cember account.....	5.609.19		
DEDUCT—			
Amount received from canal redemption fund to pay in- terest.....	155.599.05		
	<u>\$149,989.86</u>	<u>\$311,253.38</u>	<u>\$161,263.52</u>

MISCELLANEOUS EXPENSES.

WATER SERVICE COCKS.

		Cash Payments.	True Cost.
Taps.....	\$4,477.82		
Castings.....	2,340.42		
Labor.....	6,111.00		
Permit clerk	1,200.00		
W. boxes	795.76		
Repairing wagon.....	115.90		
Rubber coats.....	30.00		
Hardware	3.75		
Use of horse.....	7.50		
	<hr/>	\$15,082.15	

ADD—

Labor at shops in 1873.....	167.53		
Expense of keeping horses.....	988.24		
	<hr/>	1,155.77	

DEDUCT—

Amount received for tapping..	17,651.75		
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INCOME.

Water tax overpaid, re-funded	336.55	\$336.55
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STOCK ACCOUNT.

One horse purchased.....	136.00	136.00
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SPECIAL WATER DEPOSITS.

Amount paid back for money advanced to lay Water pipe	17,531.90	
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DEDUCT—

Amount received on special de- posits for same.....	19,683.18	
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CERTIFICATES OF INDEBTEDNESS.

Amount paid on temporary loans	170,425.42	
Amount carried forward.....	<hr/>	<hr/>
	\$203,512.02	\$472.55

	Cash Payments.	True Cost
Amount brought forward		
DEDUCT—		
Amount received for temporary loans.....	\$572,529.40	
Total miscellaneous expenses	\$203,512.02	\$472.55
Total addition to water works brought forward.....	988,462.60	991,308.90
Total operating expenses bro't forward	471,851.93	439,257.14
Total water loan interest bro't forward.....	311,253.38	161,263.52
Total water miscellaneous expenses bro't forward.....	203,512.02	472.55
	<u>\$1,975,079.93</u>	<u>\$1,592,302.11</u>

NOTE.—Of the above cash expenditures, \$134,025.06 was a transfer from income account to water pipe extension.

SEWERAGE FUND.

STATEMENT of the receipts by the Board of Public Works, and detailed statement of the expenditures from April 1st, 1873, to March 31st, 1874, inclusive :

RECEIPTS.

Received from city on account of tax for 1873	\$440,022.92
Received from temporary loans	408,000.00
Received from state on account of interest...	62,464.20
Received from house drain permits.....	24,765.45
Received from labor and material.....	584.20
Total receipts.....	<u>\$935,836.77</u>

EXPENDITURES.

OFFICE EXPENSE AND SALARIES.

		Cash Payments.	True Cost.
One-third salary of 3 comm's..	\$3,999.96		
One-third salary of secretary..	1,000.00		
One-third salary of sup't.....	1,000.00		
One-third salary of city eng'r	1,500.00		
One-third salary of book-keep- er's clerks.....	6,156.00		
Stationery.....	865.84		
Printing.....	605.67		
Car fares	276.65		
Printing and engraving for 12th annual report.....	385.00		
Miscellaneous cash items.....	224.15		
Subscription to papers.....	36.67		
Brooms and dusters.....	45.17		
Oil.....	13.42		
Advertising.....	73.71		
Horse feed.....	2.50		
Soap	5.10		
		\$16,189.84	\$16,189.84

HOUSE DRAINS.

Labor.....	9,432.75	
Pipe	10,626.29	
Laying drains.....	762.44	
Cement.....	27.31	
Keeping horse.....	87.25	
Hardware.....	4.05	20,940.09

ADD—

Expense of Lake st. drain.....	4,379.60
Expense of Paulina st. drain...	797.27
Expense of Prairie ave. drain..	231.00
Expense of 28th st. drain.....	81.90
Expense of Douglas pl. drain..	736.70
	6,226.47

Amount brought forward...	\$37,129.93	\$16,189.84
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		Cash Payments.	True Cost.
Amount brought forward...		\$37,129.93	\$16,189.84
DEDUCT—			
Amount received for permits...\$ 24,765.45			
	18,538.98		2,401.11
STOCK ACCOUNT.			
Lumber.....	666.05		
Repairing wagon.....	567.93		
Hardware.....	220.84		
Labor.....	110.05		
Repairing tools.....	248.03		
One wagon.....	100.00		
Iron work.....	54.35		
Rubber goods	52.50		
One horse.....	120.00		
Rope and chain.....	64.97		
Brooms, pails, &c.,	34.50		
Scrapers.....	16.75		
Profile cases.....	6.00		
Lanterns and reps.....	18.45		
DEDUCT—		2,280.42	
Depreciation on Tools charged			
sewers.....	1,203.37		1,077.05
STREET INTERSECTIONS.			
Labor	7,566.27		
Brick.....	8,067.40		
Cement.....	974.64		
Pipe.....	91.20		
Lumber.....	504.60		
		17,204.11	17,204.11
DAMAGE BY FIRE.			
Labor locating man-holes.....	3,382.81		
Rubber goods.....	54.50		
Pads.....	10.00		
Hardware.....	5.00		
		3,452.31	3,452.31
REPAIRS NORTH DIVISION.			
Labor	1,013.36		
Brick	1,219.90		
Amount carried forward.....	\$2,233.26	\$60,066.77	\$40,324.42

		Cash Payments.	True Cost.
Amount brought forward...	\$2,233.26	\$60,066.77	\$40,324.42
Cement.....	285.30		
Pipe.....	15.00		
		2,534.16	2,534.16
REPAIRS SOUTH DIVISION.			
Labor.....	2,270.55		
Brick.....	1,817.25		
Cement.....	147.88		
		4,235.68	4,235.68
REPAIRS WEST DIVISION.			
Labor.....	1,564.92		
Brick.....	663.30		
Cement.....	100.59		
Pipe.....	21.90		
Repairing wagon.....	5.00		
		2,355.71	2,355.71
CLEANING SEWERS NORTH DIVISION.			
Labor.....	7,268.52		
Water used.....	489.20		
Candles.....	2.00		
		7,759.72	
ADD—			
Depreciation in tools.....	133.33		
			7.893.05
CLEANING SEWERS SOUTH DIVISION.			
Labor.....	9,936.89		
Water used.....	451.10		
Candles.....	3.25		
Acid.....	2.16		
		10,393.40	
ADD—			
Depreciation in tools.....	237.53		
			10,630.93
CLEANING SEWERS WEST DIVISION.			
Labor.....	12,151.63		
Water used.....	274.00		
Candles.....	18.20		
Lanterns and reps.....	13.15		
		12,456.98	
ADD—			
Depreciation in tools.....	248.31		
			12,705.29
Amount carried forward.....		\$99,802.42	\$80,679.24

	Cash Payments.	True Cost.
Amount brought forward...	\$99,802.42	\$80,679.24
SPECIAL DEPOSIT FUND.		
Amount paid back for money advanced to build sewers.....	7,723.58	7,723.58
CERTIFICATES OF INDEBTEDNESS.		
Temporary loans paid	236,570.83	
DEDUCT—		
Amount received for temporary loans.....	\$408,000.00	
SEWERAGE LOAN INTEREST.		
Remittance to American Ex- change Nat'l Bank to pay July, 1873, interest.....	90,721.23	
Remittance to American Ex- change Nat'l Bank to pay January, 1874, interest.....	90,756.32	
Interest paid in Chicago.....	2,695.00	
Paid river improvement fund for its proportion of interest for 1873.....	183,926.13	
	<u>368,098.68</u>	
DEDUCT—		
Amount received from state to pay interest.....	62,464.20	
	<u>305,634.48</u>	
SEWERAGE SINKING FUND.		
Amount transferred from sew- erage fund to sewerage sink- ing fund.....	1,000.00	
Amount transferred from sew- erage fund to river improve- ment sinking fund.....	4,000.00	5,000.00
	<u>5,000.00</u>	<u>5,000.00</u>
Total cash expenditures.....	\$717,195.51	\$399,037.30

SEWERAGE TAX FUND.

STATEMENT of the receipts by the Board of Public Works from April 1st, 1873, to March 31st, 1874, inclusive, and detailed statement of the expenditures during the same time.

RECEIPTS.

Appropriation by the Common Council.....	\$700,000.00
Received from temporary loans.....	529,597.28
Received for constructing sewers	9,496.25
Received for brick sold.....	16,288.90
Received for pipe sold.....	12,191.36
Received for covers sold.	556.06
Total receipts.....	<u>\$1,268,129.85</u>

EXPENDITURES.

SEWERS NORTH DIVISION.

	Cash Payments.	True Cost.
Labor	\$17,056.47	
Constructing sewer for private parties	8,204.30	
Cement.....	1,300.95	
Lumber	49.86	
Tape lines.....	23.38	
Sand.....	95.41	
Keeping horse.....	52.37	
Draughting tools.....	156.36	
Plumbing	5.54	
	<u>26,944.64</u>	
ADD—		
Expense of sewer on Vine street	1,718.78	
“ “ Hill “	409.24	
“ “ Black Hawk st.	1,663.60	
“ “ Halsted “	5,290.80	
“ “ Willow “	1,439.23	
“ “ Lincoln “	12,315.96	
“ “ Hurlburt “	8,676.50	
“ “ Sophia “	188.00	
“ “ Centre “	7,461.26	
Amount carried forward.....	<u>\$31,702.11</u>	<u>\$26,944.64</u>

		Cash Payments.	True Cost.
Amount brought forward...	\$31,702.11	\$26,944.64	
Expense of sewer, Franklin st.	590.39		
“ “ Hinsdale “	1,166.90		
“ “ White “	1,450.69		
“ “ Elm “	1,054.88		
“ “ Lalor “	729.82		
“ “ Twomey “	446.07		
“ “ Sullivan “	393.94		
“ “ Connor “	742.76		
“ “ Orchard “	2,113.33		
“ “ Hince “	476.63		
“ “ Wirland “	2,681.57		
“ “ Church “	2,458.12		
“ “ Howe “	1,036.00		
“ “ Sheffield “	1,636.48		
“ “ Alaska “	852.33		
“ “ Dayton “	7.75		
“ “ Belden ave....	2,452.04		
“ “ Crosby st.....	2,764.81		
“ “ Webster ave....	2,021.61		
“ “ Larrabee st.....	3,341.90		
Brick used.....	3,732.19		
Pipe “	2,275.51		
Covers “	1,960.00		
For construction of sewers for which money was advanced..	2,411.50		
	<u>77,960.59</u>		
DEDUCT—			
Amount received for construc- tion of sewers	891.50		
	<u>77,069.09</u>		
			104,013.73
SEWERS SOUTH DIVISION.			
Labor	15,178.28		
Constructing sewers.....	3,154.20		
Cement.....	1,445.02		
Sand	150.42		
Pile work.....	2,275.00		
Extension of 22d st., sewer....	2,895.95		
Amount carried forward.....	\$25,098.87	\$26,944.64	\$104,013.73

		Cash Payments.	True Cost.
Amount brought forward...	\$25,098.87	\$26,944.64	\$104,013.73
Plumbing	134.65		
Draughting tools.....	156.86		
Stone.....	193.05		
Castings	81.91		
Lead	47.18		
Lumber	49.86		
Tape lines.....	23.38		
Horse keeping.....	52.38		
Lime.....	7.63		
Repairing tools	15.00		
Misc.....	10.75		
		25,871.02	
ADD—			
Expense of sewer on Wentworth ave.....	5,286.15		
Expense of sewer on Elgin st.	1,191.32		
“ “ Arnold “	1,955.80		
“ “ State “	12,694.69		
“ “ 29th “	2,095.89		
“ “ 31st “	3,727.78		
“ “ Vincennes ave.	10,047.70		
“ “ Burnside st.....	4,735.81		
“ “ 25th st.....	635.45		
“ “ 20th “	1,504.12		
“ “ Butterfield st..	5,476.04		
“ “ Wapanseh ave.	2,227.75		
“ “ Langley st,....	3,581.80		
“ “ McGregor st...	4,395.64		
“ “ Buddan “ ...	1,050.87		
“ “ 26th “ ...	15,332.76		
“ “ Prairie ave.....	1,041.45		
“ “ 23d st.....	1,217.02		
“ “ Lake ave.....	9,662.14		
“ “ 21st st.....	1,108.36		
“ “ 19th “.....	392.63		
“ “ 17th “.....	923.68		
“ “ Bryant ave.....	32.00		
Amount carried forward.....	\$90,316.85	\$52,815.66	\$104,013.73

		Cash Payments.	True Cost.
Amount brought forward...	\$90,316.85	\$52,815.66	\$104,013.73
Expense of sewer on 22d st.....	5.25		
“ “ Arthur st.....	41.25		
“ “ Bushnell st.....	2,762.56		
“ “ Alexander st...	1,498.69		
“ “ Tunnel st.,.....	1,340.59		
“ “ 24th st.....	2,355.30		
“ “ 16th st.....	2,414.39		
“ “ Mack st.....	496.89		
“ “ 32nd st.....	1,220.07		
“ “ Myrick ave....	40.00		
Brick used.....	3,732.10		
Pipe used	2,338.45		
Covers used.....	2,645.00		
For construction of sewers for which money was advanced..	7,144.75		
	<u>118,352.14</u>		
DEDUCT—			
Amount received for construct- ing sewers.....	8,169.75		
	<u>110,182.39</u>		136,053.41

SEWERS, WEST DIVISION.

Labor	28,788.70		
Cement	3,147.03		
Plumbing.....	549.34		
Keeping horse.....	303.38		
Repairing tools.....	203.48		
Sand	160.42		
Constructing sewer	240.00		
Lumber.....	57.06		
Tape lines.....	23.39		
Oil coats.....	15.00		
Miscellaneous cash items.....	39.65		
Castings	75.00		
Lead.....	94.92		
Amount carried forward.....	<u>\$33,697.37</u>	<u>\$52,815.66</u>	<u>\$240,067.14</u>

		Cash Payments.	True Cost.
Amount brought forward...	\$33,697.37	\$52,815.66	\$240,067.14
Advertising	17.21		
Gasket and oakum.....	6.50		
		33,721.08	
ADD—			
Expense of sewer on Stewart av	1,517.34		
“ “ Loomis st	2,803.93		
“ “ Catherine st....	1,988.60		
“ “ Monroe st.....	2,546.20		
“ “ Noble st	727.93		
“ “ Indiana st.....	10,331.58		
“ “ Canal st.....	833.40		
“ “ Tyler st.....	489.75		
“ “ Hope st.....	971.00		
“ “ Morgan st.....	5,511.78		
“ “ Jefferson st.....	1,488.29		
“ “ Waller st.....	1,311.93		
“ “ Augusta st.....	10,763.95		
“ “ Wright st.....	3,701.92		
“ “ Maxwell st.....	7,937.82		
“ “ Burlington st..	1,129.15		
“ “ Judd st.....	2,306.70		
“ “ W. Congress st	3,127.62		
“ “ Robey st.....	2,322.31		
“ “ Holt st.....	1,788.17		
“ “ Chase st.....	1,145.72		
“ “ Ashland ave...	2,596.43		
“ “ Carpenter st...	7.75		
“ “ Kinzie “... ”	16,062.72		
“ “ May “... ”	4,461.12		
“ “ Brown “... ”	1,149.40		
“ “ Sholto “... ”	2,984.38		
“ “ Union “... ”	1,778.00		
“ “ Town “... ”	421.74		
“ “ Wilson “... ”	1,216.10		
“ “ Van Buren“... ”	15,129.75		
“ “ Chicago ave...	15.50		
“ “ Erie street.....	135.50		
Amount carried forward.....	\$110,703.48	\$86,536.74	\$240,067.14

		Cash Payments.	True Cost.
Amount brought forward...	\$110,703.48	\$86,536.74	\$240,067.14
Expense of sewer on Adams st.	76.00		
“ “ Washington “	5,302.12		
“ “ Fulton “	4,707.55		
“ “ Leavitt “	873.39		
“ “ Lincoln “	1,684.80		
“ “ Evans “	474.57		
“ “ McAlister “	3,164.25		
“ “ Paulina “	1,504.69		
“ “ Bonfield “	455.90		
“ “ McGlaska “	521.32		
“ “ Ewing “	1,003.62		
“ “ Seward “	897.95		
“ “ Forquer “	1,186.08		
“ “ Connell “	2,964.50		
“ “ Newberry ave.	1,999.96		
“ “ Ada street.....	1,430.12		
“ “ Rucker street.	2,280.07		
“ “ Curtis “	13.25		
“ “ Pierce “	1,261.65		
“ “ Wood “	1,104.00		
“ “ Throop “	1,846.02		
“ “ Sampson “	547.00		
“ “ Hastings “	325.00		
“ “ Bunker “	3,036.03		
“ “ Hunt “	460.11		
“ “ De Koven “	1,995.87		
“ “ Elizabeth “	677.12		
“ “ Lake “	1,107.26		
“ “ Honore “	416.00		
“ “ Hein “	313.19		
“ “ Langdon “	292.89		
“ “ Weed “	253.46		
“ “ Warren ave....	1,234.80		
Brick used..	9,201.07		
Pipe used.....	6,217.09		
Covers used	4,705.00		
Amount carried forward.....	\$176,237.18	\$86,536.74	\$240,067.14

		Cash Payments.	True Cost.
Amount brought forward...	\$176,237.18	\$86,536.74	\$240,067.14
For construction of sewers for which money was advanced..	632.50		
	<u>176,869.68</u>		
DEDUCT—			
Amount received for construc- tion of sewers.....	435.00		
	<u>176,434.68</u>		210,155.76
SEWERAGE BRICK.			
Brick purchased.....	94,668.78		
Labor	926.27		
Advertising.....	<u>174.05</u>	95,769.10	
DEDUCT—			
Amount charged sundry sewers, and brick sold.....	<u>96,481.56</u>		
SEWERAGE PIPE.			
Pipe purchased.....	72,274.22		
Labor	1,465.27		
Advertising.....	82.98		
Storage.....	<u>150.00</u>	73,972.47	
DEDUCT—			
Amount charged sundry sewers, and pipe sold.....	<u>59,588.66</u>		14,383.81
SEWERAGE COVERS.			
Lumber and freight.....	7,413.91		
Labor	3,976.09		
Nails.....	605.30		
Hardware.....	390.50		
Dockage	<u>9.60</u>	12,395.40	
DEDUCT—			
Amount charged sundry sewers, and covers sold.....	<u>9,866.06</u>		2,529.34
CERTIFICATE OF INDEBTEDNESS.			
Temporary loans paid.....		<u>197,694.46</u>	
Amount carried forward...		\$466,368.17	\$467,136.05

	Cash Payments.	True Cost.
Amount brought forward...	\$466,368.17	\$467,136.05
DEDUCT—		
Amount received for temporary loans.....	\$529,597.28	
SUNDRY SEWERS.		
Paid W. M. Dee, for money advanced to build sewer.....	19,638.77	
Paid J. Clark & Son, for money advanced to build sewer.....	514.71	
Paid F. Tuley, Jr., & Co., for money advanced to build sewer.....	1,425.00	
Paid T. O'Brien, for money advanced to build sewer.....	1,500.00	
Paid Joliet Mound Co., for money advanced to build sewer.....	1,700.35	
Paid W. F. Myrick, for money advanced to build sewer.....	1,214.75	
Paid W. F. Tirdman, for money advanced to build sewer.....	5,813.94	
Paid T. O. Brien, for money advanced to build sewer.....	511.75	
Paid Chas. Busby, for money advanced to build sewer.....	1,185.25	
Paid Reid & Sherwin, for money advanced to build sewer..	1,299.40	
Paid Jos. Thielen, for money advanced to build sewer.....	92.25	
Paid A. R. Fahs, for money advanced to build sewer.....	92.25	
Paid J. H. Braynard, for money advanced to build sewer..	92.25	
Paid B. F. Homer, for money advanced to build sewer.....	25.00	
Paid A. A. Andrews, for money advanced to build sewer..	25.00	
Amount carried forward.....	\$34,630.67	\$466,368.17 \$467,136.05

		Cash Payments.	True Cost.
Amount brought forward...	\$34,630.67	\$466,368.17	\$467,136.05
Paid R. S. Wilson, for money advanced to build sewer.....	93.50		
Paid J. S. Perionnet, for money advanced to build sewer.....	94.00		
Paid C. J. Hambelton, for mon ey advanced to build sewer..	94.00		
Paid T. McQueeny, for money advanced to build sewer.....	1,498.24		
Paid Chicago Land Co., for mon ey advanced to build sewer..	3,477.09		
Paid Rev. Thos. O'Burke, for money advanced to build sewer	1,263.75		
Paid Allen & Bartlett, for mon ey advanced to build sewer..	387.50		
Paid Sam'l J. Walker, for mon ey advanced to build sewer..	213.81		
Paid J. E. Young, for money advanced to build sewer.....	117.87		
Paid B. G. Gill, for money advanced to build sewer.....	117.88		
Paid J. Shiller, for money ad vanced to build sewer.....	117.88		
Paid H. Greenebaum, for money advanced to build sewer.....	353.62		
Paid J. Greenebaum, for money advanced to build sewer.....	353.63		
Paid J. H. Foster, for money advanced to build sewer.....	96.33		
Paid E. F. Rose, for money advanced to build sewer.....	72.25		
Paid T. McMillan, for money advanced to build sewer.....	72.25		
		43,054.27	43,054.27
STEWART AVENUE SEWER.			
Constructing sewer.....	1,068.80		
Labor.....	55.00	1,123.80	
Amount carried forward.....		\$510,546.24	\$510,190.32

		Cash Payments.	True Cost.
Amount brought forward...		\$510,546.24	\$510,190.32
CATHARINE STREET SEWER.			
Constructing sewer.....	\$1,135.00		
Labor	61.25	1,196.25	
LOOMIS STREET SEWER.			
Constructing sewer	2,342.67		
Labor.....	86.33	2,429.00	
WENTWORTH AVENUE SEWER.			
Constructing sewer.....	3,318.55		
Labor	195.70	3,514.25	
ELGIN STREET SEWER.			
Constructing sewer.....	518.00		
Labor.....	28.00	546.00	
ARNOLD STREET SEWER.			
Constructing sewer.....	604.20		
Labor.....	84.00	688.20	
STATE STREET SEWER.			
Constructing sewer.....	9,209.07		
Labor.....	203.25	9,412.32	
VINE STREET SEWER.			
Constructing sewer.....	1,025.50		
Labor	52.00	1,077.50	
HILL STREET SEWER.			
Constructing sewer.....	195.10		
Labor.....	11.50	206.60	
BLACKHAWK STREET SEWER.			
Constructing sewer.....	1,155.95		
Labor.....	12.00	1,167.95	
HALSTED STREET SEWER.			
Constructing sewer.....	2,998.25		
Labor	176.39	3,174.64	
Amount carried forward.....		\$533,958.95	\$510,190.32

		Cash Payments.	True Cost.
Amount brought forward...		\$533,958.95	\$510,190.32
WILLOW STREET SEWER.			
Constructing sewer.....	\$1,086.12		
Labor	46.25		
		1,132.37	
LINCOLN AVENUE SEWER.			
Constructing sewer.....	9,954.87		
Labor	834.50		
		10,289.37	
MONROE STREET SEWER.			
Constructing sewer.....	1,814.60		
Labor	78.00		
		1,387.60	
NOBLE STREET SEWER.			
Constructing sewer.....	584.00		
Labor	42.68		
		576.68	
HULBURT STREET SEWER.			
Constructing sewer.....	7,192.75		
Labor	177.00		
		7,369.75	
TWENTY-NINTH ST. SEWER.			
Constructing sewer.....	1,817.80		
Labor	69.50		
		1,386.80	
THIRTY-FIRST STREET SEWER.			
Constructing sewer.....	2,648.12		
Labor	138.25		
		2,781.37	
VINCENNES AVENUE SEWER.			
Constructing sewer.....	8,944.50		
Labor	124.00		
		9,068.50	
BURNSIDE STREET SEWER.			
Constructing sewer.....	2,483.00		
Labor.....	213.00		
		2,646.00	
TWENTY-FIFTH ST. SEWER.			
Constructing sewer.....	292.74		
Labor.....	32.00		
		327.74	
Amount carried forward.....		\$570,922.08	\$510,190.32

	Cash Payments	True Cost.
Amount brought forward...	\$570,922.08	\$510,190.32
TWENTIETH STREET SEWER.		
Constructing sewer.....	\$ 444.76	
Labor.....	69.25	514.01
	<hr/>	
INDIANA STREET SEWER.		
Constructing sewer.....	6,956.30	
Labor.....	199.50	7,155.80
	<hr/>	
SOPHIA STREET SEWER.		
Labor.....		188.00
CENTRE STREET SEWER.		
Constructing sewer.....	5,228.77	
Labor.....	240.57	5,469.34
	<hr/>	
FRANKLIN STREET SEWER.		
Constructing sewer.....	288.00	
Labor.....	68.75	356.75
	<hr/>	
CANAL STREET SEWER.		
Constructing sewer.....	520.00	
Labor.....	60.00	580.00
	<hr/>	
BUTTERFIELD STREET SEWER.		
Constructing sewer.....	2,359.40	
Labor.....	167.00	2,526.40
	<hr/>	
WAHPANSEH AVENUE SEWER.		
Constructing sewer.....	2,009.00	
Labor.....	36.00	2,045.00
	<hr/>	
LANGLEY STREET SEWER.		
Constructing sewer.....	3,009.50	
Labor.....	72.50	3,082.00
	<hr/>	
TYLER STREET SEWER.		
Constructing sewer.....	435.00	
Labor.....	54.75	489.75
	<hr/>	
Amount carried forward.....	\$593,329.13	\$510,190.32

		Cash Payments.	True Cost.
Amount brought forward...		\$593,329.13	\$510,190.32
HOPE STREET SEWER.			
Constructing sewer.....	\$ 676.00		
Labor	44.00	720.00	
HINSDALE STREET SEWER			
Constructing sewer.....	872.91		
Labor	12.00	884.91	
WHITE STREET SEWER.			
Constructing sewer.....	1,089.28		
Labor	30.00	1,119.28	
ELM STREET SEWER.			
Constructing sewer.....	754.50		
Labor	22.00	776.50	
LABOR STREET SEWER.			
Constructing sewer.....	277.65		
Labor	19.00	296.65	
TWOMEY STREET SEWER.			
Constructing sewer.....	178.87		
Labor	19.00	197.87	
SULLIVAN STREET SEWER.			
Constructing sewer	144.40		
Labor ...	23.00	167.40	
CONNOR STREET SEWER.			
Constructing sewer	314.25		
Labor	33.50	347.75	
ORCHARD STREET SEWER.			
Constructing sewer	1,185.35		
Labor	102.25	1,287.60	
HINCH STREET SEWER.			
Constructing sewer	189.90		
Labor	21.00	210.90	
Amount carried forward....		\$599,337.99	\$510,190.32

		Cash Payments.	True Cost.
Amount brought forward...		\$599,337.99	\$510,190.32
M'GREGOR STREET SEWER.			
Constructing sewer.....	\$2,634.25		
Labor	88.59		
		2,722.84	
BUDDAN STREET SEWER.			
Constructing sewer	704.85		
Labor	38.75		
		743.60	
TWENTY-SIXTH STREET SEWER.			
Constructing sewer	8,665.55		
Labor	538.12		
		9,203.67	
PRAIRIE AVENUE SEWER.			
Constructing sewer	735.00		
Labor	42.00		
		777.00	
MORGAN STREET SEWER.			
Constructing sewer	3,997.40		
Labor	158.25		
		4,155.65	
JEFFERSON STREET SEWER.			
Constructing sewer	808.97		
Labor	165.80		
		974.77	
WALLER STREET SEWER.			
Constructing sewer.....	777.44		
Labor	93.35		
		870.79	
AUGUSTA STREET SEWER.			
Constructing sewer	6,747.00		
Labor	298.65		
		7,040.65	
WRIGHT STREET SEWER.			
Constructing sewer.....	2,214.00		
Labor.....	76.50		
		2,290.50	
MAXWELL STREET SEWER.			
Constructing sewer.....	5,080.76		
Labor.....	157.25		
		5,238.01	
Amount carried forward....		\$633,355.47	\$510,190.32

		Cash Payments.	True Cost
Amount brought forward...		\$633,355.47	\$510,190.32
WIELAND STREET SEWER.			
Constructing sewer.....	\$1,863.00		
Labor	40.00	1,903.00	
BURLINGTON STREET SEWER.			
Constructing sewer.....	612.75		
Labor.....	37.00	649.75	
JUDD STREET SEWER.			
Constructing sewer.....	2,019.10		
Labor.....	53.00	2,072.10	
W. CONGRESS STREET SEWER.			
Constructing sewer.....	1,815.62		
Labor.....	106.00	1,921.62	
ROBEY STREET SEWER.			
Constructing sewer.....	1,719.91		
Labor.....	93.25	1,813.16	
CHURCH STREET SEWER.			
Constructing sewer.....	1,620.57		
Labor	50.00	1,670.57	
THIRTY-THIRD STREET SEWER.			
Constructing sewer.....	908.80		
Labor	33.25	942.05	
HOLT STREET SEWER.			
Constructing sewer.....	1,322.65		
Labor.....	47.75	1,370.40	
CHASE STREET SEWER.			
Constructing sewer.....	823.92		
Labor	55.75	879.67	
ASHLAND AVENUE SEWER.			
Constructing sewer.....	2,045.93		
Labor	91.50	2,137.43	
Amount carried forward.....		\$648,715.22	\$510,190.32

		Cash Payments.	True Cost.
Amount brought forward...		\$648,715.22	\$510,190.32
CARPENTER STREET SEWER.			
Labor		7.75	
KINZIE STREET SEWER.			
Constructing sewer.....	\$10,522.31		
Labor	351.80	10,874.11	
MAY STREET SEWER.			
Constructing sewer.....	3,276.60		
Labor	103.75	3,380.35	
BROWN STREET SEWER.			
Constructing sewer.....	623.25		
Labor	43.75	667.00	
SHOLTO STREET SEWER.			
Constructing sewer.....	2,168.13		
Labor.....	81.00	2,249.13	
UNION STREET SEWER.			
Constructing sewer.....	1,067.25		
Labor	47.75	1,115.00	
TOWN STREET SEWER.			
Constructing sewer.....	240.75		
Labor	12.50	253.25	
LAKE AVENUE SEWER.			
Constructing sewer.....		9,662.14	
WILSON STREET SEWER.			
Constructing sewer	740.50		
Labor	40.00	780.50	
TWENTY-FIRST ST. SEWER.			
Constructing sewer	851.66		
Labor	20.00	871.66	
NINETEENTH STREET SEWER.			
Constructing sewer.....	167.00		
Labor	14.63	181.63	
Amount carried forward.....		\$678,757.47	\$510,190.32

		Cash Payments.	True Cost.
Amount brought forward...		\$678,757.74	\$510,190.32
SEVENTEENTH ST. SEWER.			
Constructing sewer	\$ 394.06		
Labor	34.62	428.68	
HOWE ST. SEWER.			
Constructing sewer	1,000.00		
Labor	36.00	1,036.00	
VAN BUREN ST. SEWER.			
Constructing sewer	9,440.52		
Labor	312.31	9,752.83	
SHEFFIELD ST. SEWER.			
Constructing sewer	1,040.37		
Labor	67.75	1,108.12	
ALASKA ST. SEWER.			
Constructing sewer	412.30		
Labor	12 00	424.30	
BRYANT AVENUE SEWER.			
Labor		32.00	
DAYTON ST. SEWER.			
Labor		7.75	
ERIE ST. SEWER.			
Labor		135.50	
ADAMS ST. SEWER.			
Labor		76.00	
WASHINGTON ST. SEWER			
Constructing sewer	3,486.60		
Labor	105.75	3,592.35	
FULTON ST. SEWER.			
Constructing sewer	3,147.25		
Labor	104.25	3,251.50	
Amount carried forward.. ..		\$698,602.77	\$510,190.32

	Cash Payments.	True Cost.
Amount brought forward...	\$698,602.77	\$510,190.32
LEAVITT ST. SEWER.		
Constructing sewer	\$ 688.92	
Labor	30.62	719.54
LINCOLN ST. SEWER.		
Constructing sewer	1,288.10	
Labor	69.88	1,357.98
CHICAGO AVENUE SEWER.		
Labor		15.50
EVANS STREET SEWER.		
Constructing sewer.....		212.37
M'ALISTER STREET SEWER.		
Constructing sewer.....	1,800.00	
Labor	89.25	1,889.25
PAULINA STREET SEWER.		
Constructing sewer.....	1,164.62	
Labor	55.75	1,220.37
TWENTY-SECOND STREET SEWER.		
Labor		5.25
ARTHUR STREET SEWER.		
Labor		41.25
BUSHNELL STREET SEWER.		
Constructing sewer.....	1,235.61	
Labor	111.50	1,347.11
BONFIELD STREET SEWER.		
Constructing sewer.....		193.25
McGLASKA STREET SEWER.		
Constructing sewer.....		249.00
ALEXANDER STREET SEWER.		
Constructing sewer.....	671.93	
Amount carried forward.....	\$706,525.57	\$510,190.32

	Cash Payments.	True Cost.
Amount brought forward...	\$706,525.57	\$510,190.32
EWING ST. SEWER.		
Constructing sewer	\$ 578.47	
Labor	50.75	629.22
SEWARD ST. SEWER.		
Constructing sewer		521.75
BELDEN AVENUE SEWER.		
Constructing sewer		1,411.75
FORQUER ST. SEWER.		
Constructing sewer		683.88
FINNELL ST. SEWER.		
Constructing sewer		607.15
CONNELL ST. SEWER.		
Constructing sewer		1,541.90
TWENTY-FOURTH STREET SEWER.		
Constructing sewer		1,095.50
NEWBERRY AVENUE SEWER.		
Constructing sewer		981.76
SIXTEENTH STREET SEWER.		
Constructing sewer		1,339.57
ADA STREET SEWER.		
Constructing sewer		1,165.85
RUCKER STREET SEWER.		
Constructing sewer.		1,791.75
CURTIS STREET SEWER.		
Labor		13.25
PIERCE STREET SEWER.		
Constructing sewer		803.25
THROOP STREET SEWER.		
Constructing sewer	738.50	
Amount carried forward....	\$719,850.15	\$510,190.32

	Cash Payments.	True Cost.
Amount brought forward...	\$719,850.15	\$510,190.32
WOOD STREET SEWER.		
Constructing sewer	1,480.95	
CROSBY STREET SEWER.		
Constructing sewer	1,974.02	
WEBSTER AVENUE SEWER.		
Constructing sewer	1,697.50	
LARRABEE STREET SEWER.		
Constructing sewer	2,913.50	
SAMPSON STREET SEWER.		
Constructing sewer	262.00	
HASTINGS STREET SEWER.		
Constructing sewer	166.00	
BUNKER STREET SEWER.		
Constructing sewer	1,867.23	
MARK STREET SEWER.		
Constructing sewer	234.09	
HUNT STREET SEWER.		
Constructing sewer	269.31	
DE KOVEN STREET SEWER.		
Constructing sewer	1,318.47	
ELIZABETH STREET SEWER.		
Constructing sewer	572.15	
THIRTY-SECOND STREET SEWER.		
Constructing sewer	943.40	
MYRICK AVENUE SEWER.		
Labor	40.00	
LUKE STREET SEWER.		
Constructing sewer	676.39	
HONORE STREET SEWER.		
Constructing sewer	307.20	
Amount carried forward.....	\$734,572.36	\$510,190.32

	Cash Payments.	True Cost.
Amount brought forward...	\$734,572.36	\$510,190.32
HEIN STREET SEWER.		
Constructing sewer.....	140.75	
LANGDON STREET SEWER.		
Constructing sewer.....	123.53	
WEED STREET SEWER.		
Constructing sewer.....	112.50	
WARREN AVENUE SEWER.		
Constructing sewer.....	567.00	
Paid H. C. Middaugh, const. sewer.....	256.58	256.58
Contractors for percentage re- tained on contracts for 1872	7,638.18	7,638.18
	<u>\$743,410.90</u>	<u>\$518,085.08</u>
Less 15 per cent. reserved on contractors for 1873.....	11,801.63	11,801.63
Total cash expenditures.....	<u>\$731,609.27</u>	<u>\$506,283.45</u>

BOARD OF PUBLIC WORKS APPROPRIATION FUND.

STATEMENT of the receipts of the Board of Public Works, from April 1st, 1873, to March 31st, 1874, inclusive, and detailed statement of expenditures during same time.

RECEIPTS.

Amount of appropriation by Com- mon Council.....	\$1,180,506.38
Amount received from temporary loans	377,176.53
“ “ “ C. B. & Q. R.	
R. Co. Canal street viaduct.....	65,154.67
Amount received from C. & N. W. R.	
R. Co. Canal street viaduct.....	27,045.33
Amount carried forward....	<u>\$1,649,882.91</u>

Amount brought forward.....	\$1,649,882.91	
Amount received from P. Ft. W. & C. R. R. Co. Twelfth street viaduct	12,876.65	
Amount received from special assess- ment expenses.....	28,152.58	
Amount received from public benefits	23,000.00	
“ “ “ canal redemp- tion fund for bridges.....	22,149.70	
Amount received from Cook county for rent.....	11,750.78	
Amount received for repaving.....	6,354.55	
“ “ “ permits issued....	6,238.62	
“ “ “ stone sold.....	280.00	
“ “ “ lumber sold.....	313.85	
“ “ “ damages to br'dgs	329.80	
“ “ “ Cook county ex- pense of plans.....	553.18	
Amount received for Macadam sold...	250.00	
“ “ “ one lamp broken	7.50	
“ “ “ brick sold.....	22.00	
“ “ “ voucher canceled.	25.50	
	<u>1,762,187.62</u>	
Add for voucher drawn in error.....	3,474.99	
Balance on hand April 1st, 1873.....	<u>490,792.72</u>	\$2,256,455.33

EXPENDITURES.

NORTH DIVISION.	Cash Payments.	True Cost.
Labor on streets.....	\$ 44,900.47	
Labor cleaning improved streets	16,282.27	
Lumber.....	5,275.21	
Gravel	889.00	
Nails.....	457.38	
Hardware.....	116.45	
Cinders.....	303.00	
Rent of lumber yard.....	300.00	
Brick bats	30.00	
Cleaning Tunnels.....	75.00	
Amount carried forward.....	<u>\$68,628.78</u>	

	Cash Payments.	True Cost.
Amount brought forward...	\$68,628.78	
Brooms.....	9.75	
	<u> </u>	\$68,638.53
DEDUCT—		
Amount received from repairing	893.45	
Amount received from permits	3,564.39	
Amount received from S. and		
W. Div.....	4,180.69	
	<u> </u>	
	4,638.53	\$60,000.00
SOUTH DIVISION.		
Labor on streets.....	50,584.39	
Labor cleaning streets.....	26,174.42	
Lumber.....	11,233.03	
Gravel.....	8,068.00	
Nails.....	719.13	
Spawls.....	2,482.54	
Cinders.....	650.15	
Filling.....	247.00	
Repairing tools	219.10	
Hardware.....	37.27	
Advertising.....	57.39	
Cleaning tunnel.....	587.50	
Salt.....	11.00	
Egan avenue bridge.....	512.50	
Iron work.....	25.00	
Keeping horse	40.00	
Brooms.....	9.50	
Labor at shops.....	271.51	
	<u> </u>	101,929.43
ADD—		
Amount transferred to North		
Division.....	2,000.00	
	<u> </u>	
	103,929.43	
DEDUCT—		
Amount received for re-paving	2,626.73	
	<u> </u>	101,302.70
WEST DIVISION.		
Labor on streets.....	92,992.11	
Labor cleaning streets.....	34,128.31	
Lumber.....	14,992.81	
	<u> </u>	
Amount carried forward....	\$142,113.23	\$170,567.96
		\$161,302.70

	Cash Payments.	True Cost.
Amount brought forward...	\$142,113.23	\$170,567.96
Macadam	3,263.17	
Nails.....	1,874.36	
Gravel.....	1,005.75	
Improving 16th street.....	1,262.78	
Filling.....	1,125.80	
Cinders.....	875.90	
Cleaning tunnels.....	737.50	
Hardware.....	218.01	
Repairing tools.....	267.65	
Rent lumber lot.....	200.00	
Keeping horse.....	135.00	
Advertising...	80.67	
Brooms	26.05	
	<u>153,185.87</u>	
ADD—		
Amount transferred to Canal street viaduct.....	4,201.29	
Amount transferred to 12th street viaduct	5,000 00	
Amount transferred to North Division	2,180.69	
	<u>11,381.98</u>	
DEDUCT—		
Amount received for re-paving	2,712.36	
	<u>8,669.62</u>	
		161,855.49
SIDEWALKS, NORTH DIVISION.		
One-third salary of sup't.....	400.00	
Salary of two inspectors.....	1,800.00	
Constructing walk.....	1,116.43	
Advertising.....	42.08	
Nails.....	5.13	
	<u>3,363.64</u>	
ADD—		
Amount transferred to Special Assessments.....	5,000.00	8,363.64
Amount carried forward.....	<u>\$327,117.47</u>	<u>\$381,521.83</u>

	Cash Payments.	True Cost.
Amount brought forward...	\$327,117.47	\$331,521.83
SIDEWALKS, SOUTH DIVISION.		
One-third salary of sup't.....	\$ 400.00	
Salary three inspectors.....	2,700.00	
Constructing walk.....	582.02	
Nails.....	5.25	
	<u>3,687.27</u>	
ADD—		
Amount transferred to Lake Park.....	9,500.00	
Amount transferred to Special Assessments.....	6,700.00	
	<u>16,200.00</u>	
		19,887.27
SIDEWALKS, WEST DIVISION.		
One-third salary of sup't.....	400.00	
Salary four inspectors.....	3,347.32	
Constructing walk.....	1,045.97	
Lumber.....	300.00	
	<u>5,093.29</u>	
DEDUCT—		
Amount received for construction of walk.....	22.00	5,071.29
CITY OFFICE EXPENSE.		
Stationery.....	917.76	
Printing.....	644.61	
Car Fares.....	276.69	
Miscellaneous cash items.....	267.77	
Labor.....	188.33	
Advertising.....	73.26	
Printing Twelfth Annual Rep't	385.00	
Pails and matches.....	22.93	
Subscription to papers.....	36.67	
Hardware.....	14.60	
Use of carriage.....	5.00	
Gas fitting.....	8.20	
	<u>2,840.82</u>	
ADD—		
Amount transferred to replacing maps.....	504.98	3,345.80
Amount carried forward.....	<u>\$338,738.85</u>	<u>\$359,826.19</u>

		Cash Payments.	True Cost.
Amount brought forward...		\$338,738.85	\$359,826.19
SALARIES.			
One-third salary of commis- sioners.....	\$3,999.96		
One-third salary of secretary	1,000.00		
One-third salary of superintendent	1,000.00		
One-third salary of city engi- neer.....	1,500.00		
One-third salary of bookkeep- er and clerks	5,825.00		
		13,324.96	13,324.96
POUNDS.			
Rent of lots.....	660.48		
Pails and tubs.....	10.25		
Lumber.....	6.00		
Stove.....	19.15		
Hardware.....	6.34		
		702.22	702.22
WASHINGTON STREET TUNNEL.			
Salary of engineer and labor...	1,325.00		
Coal.....	147.55		
Raising walls and new coping..	2,139.01		
Gas fitting.....	100.98		
Repairing boiler.....	46.24		
Cleaning tunnel.....	87.50		
Alcohol.....	26.40		
Salt	58.50		
Advertising	8.60		
Hardware.....	13.18		
Sprinkling	42.37		
Nails.....	30.75		
		4,026.08	4,026.08
LA SALLE STREET TUNNEL			
Raising walls and new coping..	4,169.46		
Salary of sup't and labor.....	1,634.58		
Coal.....	91.60		
Belting.....	60.96		
Cleaning tunnel.....	87.50		
Gas fitting.....	44.88		
Amount carried forward.....	\$6,088.98	\$356,792.11	\$377,879.45

		Cash Payments.	True Cost.
Amount brought forward...	\$6,088.98	\$356,792.11	\$377,879.45
Sprinkling	66.40		
Iron entrance houses.....	1,525.00		
Iron work.....	107.40		
Advertising	27.73		
Alcohol.....	53.95		
Salt.....	6.30		
Brooms and tools.....	21.42		
Cement.....	21.00		
		7,918.18	7,918.18
SPECIAL ASSESSMENT EXPENSE.			
Salary of clerks.....	9,500.00		
Salary of engineers.....	7,800.00		
Salary of draughtsmen.....	2,583.10		
Salary of rodmen.....	3,600.00		
Salary of inspectors.....	953.75		
Advertising.....	6,266.12		
Court fees.....	3,497.01		
Special commissioners.....	1,692.00		
Notarial fees.....	489.75		
Witness fees.....	2,407.60		
Keeping horse	188.25		
Stationery	172.60		
Ctf. of Sale.....	50.00		
Stamps.....	50.00		
Hardware	34.20		
Use of carriages.....	43.00		
Printing	40.00		
		39,367.38	
DEDUCT—			
Amount received from assess- ments.....	28,152.58		
Amount received from side- walks.....	11,700.00		
	39,852.58		
PUBLIC BUILDINGS—CITY HALL.			
Coal	5,446.63		
Salary of janitor, engineer and fireman	5,780.00		
Amount carried forward.....	\$11,226.63	\$404,077.67	\$385,797.63

		Cash Payments.	True Cost.
Amount brought forward...	\$11,226.63	\$404,077.67	\$385,797.63
Labor	648.83		
Gas.....	2,239.00		
Carpenter work	672.13		
Plumbing and gas fitting.....	459.48		
Plastering.....	113.52		
Hardware.....	119.05		
Door springs, locks, and reps. of same.....	339.82		
Furniture.....	139.75		
Asphalt pavement.....	246.60		
Painting and glazing.....	844.79		
Rent of Kentucky block.....	1,000.00		
Steam fitting.....	148.59		
Lumber.....	299.04		
Smoke burner.....	400.00		
Sprinkling	255.00		
Steam fitting.....	85.87		
Ice.....	222.88		
Miscellaneous cash items.....	71.68		
Stone.....	280.00		
Brooms.....	90.60		
One flag.....	44.00		
Repairing roof.....	134.45		
Carpeting.....	117.50		
Advertising	15.49		
Sealing scales.....	10.50		
		20,224.70	
DEDUCT—			
Am't received for rent.....	11,750.78		
Am't received for stone sold...	280.00		
	12,030.78		8,193.92

SMALL POX HOSPITAL.

Paid J. H. Donlin, masonry and carpentry.....	12,600.00		
Paid G. W. Manning, painting	1,003.25		
Paid for plumbing.....	1,532.03		
Amount carried forward.....	\$15,135.28	\$424,302.37	\$393,991.55

		Cash Payments.	True Cost.
Amount brought forward...	\$15,135.28	\$424,302.37	\$393,991.55
Brick	1,679.00		
Sewerage pipe.....	1,460.90		
Water pipe.....	1,714.38		
Inspector's labor.....	643.00		
Inspector's labor on sewers.....	212.00		
Sand.....	93.33		
Cement.....	109.05		
Advertising.....	51.65		
Building barn.....	575.00		
		21,673.59	21,673.59
LINCOLN PARK.			
Labor	4,401.25		
Feed for animals	177.67		
Coal.....	24.00		
Hardware.....	18.08		
Lawn mower.....	44.70		
Grass seed.....	11.50		
Filling	32.50		
Lumber.....	3.02		
		4,712.72	4,712.72
WASHINGTON PARK.			
Labor	955.50		
Trees.....	2,354.00		
Masonry work, stone, fence, &c	3,439.92		
Laying walks.....	1,787.00		
Service pipe	51.80		
Hose.....	41.00		
Lawn mower.....	36.10		
Advertising	17.22		
Seed.....	69.75		
Signs.....	4.00		
Hardware.....	10.25		
		8,766.54	8,766.54
LAKE PARK.			
Labor	13,304.03		
Constructing walk.....	11,495.11		
Fountain.....	528.66		
Lawn mower.....	101.00		
Amount carried forward....	\$25,428.80	\$459,455.22	\$429,144.40

		Cash Payments.	True Cost.
Amount brought forward...	\$25,428.80	\$459,455.22	\$429,144.40
Seed and tools.....	96.55		
Hose	76.75		
Sodding	89.62		
Repairing tools.....	38.73		
		25,730.45	
DEDUCT—			
Am't transf'd from sidewalks			
S. Div. for cost of walk.....	9,500.00		16,230.45
ELLIS PARK.			
Labor.....	1,320.10		
Const. sewer.....	206.62		
Iron work.....	55.00		
Lawn mower.....	25.00		
Coal.....	23.70		
		1,630.42	1,630.42
VERNON PARK			
Labor.....	4,605.78		
Lumber.	28.43		
Hardware	36.55		
Lawn mower.....	42.20		
Hose.....	52.66		
Nails.....	7.88		
Const. sewer.....	357.20		
		5,130.70	
DEDUCT—			
Amount transferred from Jefferson Park.....	300.00		4,830.70
WICKER PARK.			
Labor improving park.....	4,582.81		
Const. sewer.....	309.67		
Seed and tools.....	41.15		
Plumbing.....	339.77		
Hardware.....	6.25		
Lumber.....	2.42		
Cinders.....	32.50		
Trees.....	367.50	5,682.07	5,682.07
Amount carried forward.....		\$497,628.86	\$457,518.04

		Cash Payments.	True Cost.
Amount brought forward...		\$497,628.86	\$457,518.04
UNION PARK.			
Labor.....	\$2,735.72		
Animal feed.....	497.11		
Coal.....	16.40		
Iron work.....	170.80		
Seed.....	4.00		
Lawn mower.....	94.68		
Gas.....	7.80		
Lumber.....	54.37		
Stove and fixtures.....	25.65		
		3,606.53	3,606.53
JEFFERSON PARK.			
Labor.....	1,166.25		
Animal feed.....	57.23		
Tools.....	11.95		
Plumbing.....	11.60		
Lawn mower.....	26.00		
Coal.....	11.85		
Flowers.....	23.60		
		1,308.48	
ADD—			
Amount transferred to Vernon Park.....	300.00		1,608.48
CHICAGO HARBOR.			
Dredging and building dock....	67,735.10		
Harbor master salaries.....	3,916.66		
Building dock.....	1,088.71		
Inspectors.....	962.50		
Removing obstructions.....	317.00		
Use of tugs.....	242.00		
Rope.....	111.87		
Advertising.....	36.35		
		74,410.19	
ADD—			
Amount transferred to dock line survey.....	164.81		
Amount carried forward.....	\$164.81	\$576,954.06	\$462,733.05

		Cash Payments.	True Cost.
Amount brought forward...	\$164.81	\$576,954.06	\$462,733.05
DEDUCT—			
Am't received for pile driving	100.00		
	<u>64.81</u>		74,475.00
PUBLIC BENEFITS.			
Imp. intersections of streets...	289,852.55		
Salary of inspectors.....	2,377.42		
Improving alleys.....	6,660.73		
Advertising.....	108.52		
Masonry work.....	555.20		
Lumber.....	140.40		
Transf'd from public benefits..	250.00		
	<u>299,944.82</u>		
DEDUCT—			
Am't received from Macadam.	250.00		
Am't transf'd from assessm'ts	23,000.00		
	<u>23,250.00</u>		276,694.82
CANAL STREET VIADUCT.			
Paid De Golyer & Hubbard,			
masonry work.....	54,764.81		
Paid Fox & Howard, viaduct.	37,200.00		
Paid raising buildings.....	30,752.00		
Paid plumbing work.....	2,685.09		
Lumber.....	376.62		
Inspectors.....	462.50		
Advertising.....	97.55		
Cement.....	16.22		
Const. walk.....	46.50		
	<u>126,401.29</u>		
DEDUCT—			
Am't rec'd from C. B. and Q.			
R. R. Co.....	65,154.67		
Am't rec'd from N. W. R'y Co	27,045.33		
Am't rec'd from West Division	4,201.29		
	<u>96,401.29</u>		30,000.00
Amount carried forward.....		\$1,003,300.17	\$843,902.87

		Cash Payments.	True Cost.
Amount brought forward.		\$1,038,300.17	\$843,902.87
TWELFTH STREET VIADUCT.			
Earnshaw & Gobel, masonry			
work.....	\$22,872.35		
American Bridge Co., bridge	4,449.00		
Raising buildings.....	3,295.82		
Plumbing	700.64		
Lumber	837.90		
Inspectors.....	510.00		
Advertising.....	109.02		
		32,774.73	
DEDUCT—			
Am't rec'd from P. Ft. W. &			
Chicago R. R. Co	12,876.65		
Am't rec'd from West Div...	5,000.00		
	17,876.65		14,898.08
CITY HALL PLANS.			
Premium on plans.....	4,000.00		
Carpentry work and labor			
watching plans.....	1,241.58		
Hardware.....	12.23		
Coal.....	14.65		
		5,268.46	5,268.46
STREET SIGNS.			
New signs erected.....	481.26		
Painting.....	27.50		
Advertising	29.07		
Lettering signs.....	96.60		
Nails.....	8.25		
Twine	1.45		
		644.13	644.13
PUBLIC HYDRANTS.			
Fountains.....	516.00		
Plumbing work.....	538.55		
Cutting stone.....	18.00		
		1,072.55	1,072.55
STREET LAMPS.			
Lamp posts repaired.....	998.41		
Lamps	369.75		
Amount carried forward..	\$1,368.16	\$1,043,060.04	\$865,786.09

		Cash Payments.	True Cost.
Amount brought forward	\$1,368.16	\$1,043,060.04	\$865,786.09
New posts.....	592.00		
Alterations in lamps.....	562.75		
Taking down lamps.....	22.60		
Advertising.....	87.32		
Painting.....	25.50		
		2,658.32	2,658.32
REPLACING MAPS.			
Paid for privilege of copying	5,000.00		
Paid for new atlas.....	656.00		
Draughtsman.....	250.00		
		5,906.00	
DEDUCT—			
Am't transferred from Office			
Expense	504.98		
			5,401.02
• HOUSE AND STREET PERMITS.			
Salary of special constables			
and clerks.....	5,419.33		
Advertising.....	2,097.14		
Printing	52.80		
Badges	45.00		
		7,614.27	
DEDUCT—			
Amount received for permits	7,238.62		
			375.65
CLEANING NORTH BRANCH.			
Labor	633.50		
Rods and augers.....	170.25		
Survey	62.00		
Car fares.....	17.60		
Advertising.....	39.79		
		923.14	923.14
DOCK LINE SURVEY.			
Salary of engin'rs and rodm'n	5,784.71		
Car fares.....	193.60		
Staffs	6.00		
Chain	2.25		
Boat	55.00		
Hardware.....	5.25		
Stationery	18.00		
Draughtsman ..	100.00	6,164.81	6,164.81
Amount carried forward.....		\$1,066,326.58	\$881,309.03

		Cash Payments.	True Cost.
Amount brought forward.		\$1,066,326.58	\$881,309.03
LAND DAMAGES AT POLK ST. BRIDGE.			
B. Lowenthal, land	\$ 934.50		
Grant Goodrich, land.....	826.20		
J. M. Wilson, land.....	722.93		
B. Lowenthal.....	516.37		
		3,000.00	3,000.00
LAND DAMAGES AT 12TH ST. BRIDGE.			
W. R. Loomis, land.....	7,200.00		
Geo. A. Severns, land.....	7,200.00		
		14,400.00	14,400.00
LAND DAMAGES AT 22D ST. BRIDGE.			
E. McConnell, land.....	5,000.00		
Fox & Howard, dredging and docking.....	6,698.14		
		11,698.14	11,698.14
CERTIFICATES OF IND.			
Temporary loans paid.....		312,053.07	
DEDUCT—			
Am't received for temp. loans	377,176.53		
LAKE STREET BRIDGE.			
Earnshaw & Gobel, masonry work.....	10,456.83		
Fox & Howard, viaduct.....	17,930.29		
Inspector	155.00		
		28,542.12	28,542.12
CLYBOURNE PLACE BRIDGE.			
Fox & Howard, contractors.	13,350.00		
Advertising.....	17.22		
		13,367.22	13,367.22
THIRTY-FIFTH STREET BRIDGE.			
Fox & Howard, contractors.		9,330.00	9,330.00
CONFISCATED PROPERTY.			
Amount paid for lumber con- fiscated.....		205.37	
DEDUCT—			
Amount received for lumber sold.....	335.85		
N. HALSTED STREET VIADUCT.			
Advertising.....		36.34	36.34
Amount carried forward..		\$1,458,958.84	\$961,682.85

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	Cash Payments.	True Cost.
Amount brought forward...	\$1,458,958.84	\$961,682.85

BRIDGE DEPARTMENT.

Salary of bridge tenders.....	\$38,872.50
Labor repairing bridge.....	13,262.03
Lumber	5,217.45
Iron work.....	1,523.22
Painting bridges.....	1,199.90
Coal.....	997.43
Driving piles	2,174.67
Oil.....	461.31
Nails	673.15
Masonry Work.....	211.79
Lanterns and repairs.....	177.32
Rope and oars.....	138.86
Hardware.....	159.68
Advertising.....	197.09
Damages.	200.00
Bolts.....	285.53
Clocks and repairs.....	27.50
Brooms.....	99.00
Salt.....	14.40
Sprinkling.....	95.00
Stores.....	61.90
Labor at shops	112.65
Signal gear.....	10.50
Horse keeping.....	45.00
Plastering.....	35.75
Use of tug.....	8.00
Glazing	19.65
One bell.....	35.00

66,316.28

DEDUCT—

Amount received for damages	355.30
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65,960.98

CLARK STREET VIADUCT.

Iron stairs.....	165.00	165.00
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Total cash expenditures.....	\$1,525,440.12	\$1,027,808.85
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RIVER FUND IMPROVEMENT.

RECEIPTS.

Received from temporary loans	\$137,000.00	
“ “ city sewerage tax	183,926.13	
Total receipts.....		\$320,926.13

EXPENDITURES.

RIVER IMPROVEMENT LOAN INTEREST.

	Cash Payment.	True Cost.
Remittance to American Exchange National Bank to pay July, 1873, interest.....	\$91,262.58	
Remittance to American Exchange National Bank to pay January, 1874, interest.	91,648.55	
Int. paid in Chicago.....	1,015.00	
	\$ 183,926.13	\$183,926.13

CERTIFICATES OF INDEBTEDNESS.

Temporary loans paid.....	139,631.25	
DEDUCT—		
Amount received for temporary loans.....	137,000.00	2,631.25
Paid V. Hickox lab. mat.....	5,775.18	5,775.18
Total expenditures.....	\$329,332.56	\$192,332.56

CITY BRIDEWELL FUND.

MISCELLANEOUS EXPENSE.

Engines and boiler	\$6,211.71
Roofing	1,665.02
Planting Trees.	1,041.75
Steam fitting.....	1,232.21
Lumber.	1,476.81
Hardware.....	204.99
Iron and nails.....	702.50
Amount carried forward.....	\$12,534.99

Amount brought forward...	\$12,534.99	
Cinders.....	272.85	
Lead, oil and glass.....	223.78	
Sand.....	495.19	
Lime and cement.....	389.60	
Masonry work.....	216.70	
Labor.....	259.50	
Use of dock.....	16.00	
Drying plank.....	10.00	
Sewer pipe.....	26.02	
Teaming.....	68.00	
Pumps.....	57.24	
Use of carriage.....	16.00	
	<u> </u>	\$14,585.87

RECAPITULATION.

RECEIPTS.

Water fund.....	\$1,880,894.16	
Sewerage fund.....	935,836.77	
Sewerage tax fund.....	1,268,129.85	
Appropriation fund.....	2,256,455.33	
River improvement fund.....	320,926.13	
Total receipts.....	<u> </u>	\$6,662,242.24

EXPENDITURES.

Water fund.....	\$1,975,079.93	
Sewerage fund.....	717,195.51	
Sewerage tax fund.....	731,609.27	
Appropriation fund.....	1,525,440.12	
River improvement fund.....	329,332.56	
City Bridewell fund.....	14,585.87	
Total expenditures.....	<u> </u>	\$5,293,243.26

Respectfully submitted,

E. M. JOHNSON,
Book Keeper.

